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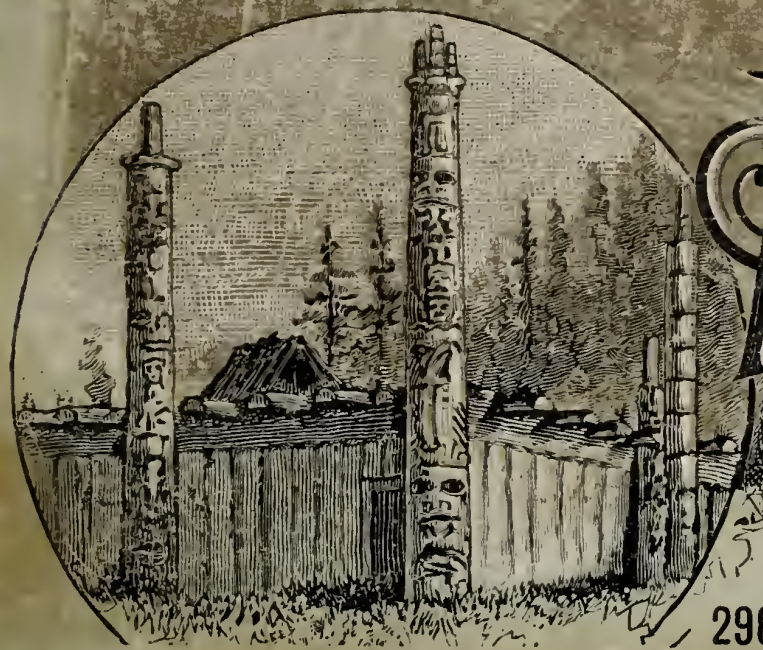

Two Excursions to ALASKA

Leaving Boston July 11 and 25, 1891.

W. RAYMOND. I. A. WHITCOMB.

296 WASHINGTON STREET (opposite School St.), BOSTON, MASS.

SEASON OF 1891.

TWO GRAND SUMMER TOURS

TO

ALASKA

The Outward Journey over the Canadian Pacific Railway,

With visits to Montreal, Winnipeg, the Banff Hot Springs (in the Canadian National Park), the Glaciers of the Selkirks in British Columbia, Vancouver and Victoria;

And the Return over the Northern Pacific Railroad,

With visits to Portland, Tacoma, Seattle, Spokane Falls, Minneapolis, St. Paul, etc.,

AND

A WEEK IN THE YELLOWSTONE NATIONAL PARK.

The Parties to leave Boston Saturdays, July 11 and 25, and to return Saturdays, August 29 and September 12.

PRICE OF TICKETS (all Traveling Expenses included), **$500.00.**

W. RAYMOND, I. A. WHITCOMB,

296 WASHINGTON STREET (OPPOSITE SCHOOL STREET), BOSTON, MASS.

AMERICAN PRINTING & ENGRAVING CO., 50 ARCH ST., BOSTON.

Suggestions in Regard to Joining the Party.

Persons desiring to join a party should send their names to be registered at as early a date as convenient. A name is registered as soon as there is an intention of going, and this registration secures a place in the cars and steamer, at hotels where sojourns may be made, and in every way insures membership in the party. No payment of money is required in this connection, and no responsibility is incurred. If circumstances prevent the person from going, early notice of the fact should be sent to us. The name will then be taken from the list, and the next applicant permitted to fill the vacancy. Tickets can be taken and paid for at the convenience of the passenger any time to within four days of the date of departure; and, should the passenger then be prevented from going, the money will be refunded. The advantage of sending in names early is readily seen. It frequently occurs that parties are filled long before the dates of departure.

UPB

SEASON OF 1891.

CANADA, THE PACIFIC NORTHWEST,

ALASKA,

AND THE

YELLOWSTONE NATIONAL PARK.

JULY 11 TO AUGUST 29; JULY 25 TO SEPTEMBER 12.

Two tours of fifty days each, to include the magnificent scenic regions lying along the Canadian Pacific Railway, a voyage through the romantic inland waters of British Columbia to Alaska, a comprehensive round of the points of interest in that famed land of mountains and glaciers, a series of visits to the cities of Puget Sound and Oregon, an ascent of the noble Columbia River, and a return eastward over the Northern Pacific Railroad, with a divergence through that land of wonders, the Yellowstone National Park, will constitute one of our chief excursion enterprises for 1891. These wonderfully picturesque routes were brought into an excursion pro-

gramme for the first time last year, forming a panorama of matchless scenic interest. Volumes might be written regarding the great features of scenery that serve to make a journey over the western end of the Canadian Pacific Railway such a remarkable experience, and many volumes have been written descriptive of the Pacific Coast country and our northern border-land, through which we are to return. These pages can merely give hint of the marvels to be seen on such a journey, and of the grander scenes in Alaska,— the chief objective point of our expedition. The voyage from Victoria to Alaska and return will occupy about twelve days, and will be made in one of the finest steamers of the Pacific Coast Steamship Company's fleet, the "Queen," Captain James Carroll. All the famous scenic points in Southern Alaska, which have made the Alaska trip so famous, will be visited, including Fort Wrangel, Juneau, Douglas Island, Sitka, and the great Muir Glacier, on Glacier Bay. There will be time for landing and sight-seeing at all the chief points of interest, and everywhere tourists will have unsurpassed opportunities for scanning the wonderful scenery of our northernmost possessions, and for studying the quaint and primitive native life. The entire route from Puget Sound to the farthest northern point reached, is lined with scenes of wonderful and awe-inspiring character — mountains of great height, with fathomless depths at their very feet; cascades, which seem to tumble from the sky itself; densely wooded shores, whose solitudes have never yet been invaded by man; and vast fields of snow and ice, which glow in the sunlight like plains of gold and silver. Thousands of mountain peaks are seen that no man has ever visited, and that are as yet even unnamed. In Alaska, great glaciers, many fold larger than the grandest ice fields of Switzerland, flow down to the sea, mingling with the floods of the ocean, and breaking off in huge masses of fantastical shapes. In no part of the world is there so much wild grandeur encompassed in a voyage of equal duration.

The time selected for the trip is seasonable. Long days prevail at the north through the summer, and the weather is likely to be propitious for sight-seeing. The regions of the snow peak and the glacier are certainly inviting to the dweller in the heated city, and in many ways a northward tour is in summer especially delightful. The entire journey will be made in the most comfortable manner possible. Superb trains of Canadian Pacific coaches, comprising sleeping-cars and dining-cars — the former being capacious and richly furnished — will convey the party across the country on its outward trip. The very best accommodations have been reserved on board the Alaska steamer, and the homeward trip will be made in a train of elegantly appointed Pullman vestibuled cars, with dining-car. Nothing that can contribute to the safety, comfort, and well-being of the passengers will be omitted. Only two persons will be placed in a section of the sleeping-cars, and only two persons in each stateroom on the steamer.

From Boston to Montreal.

The parties will leave Boston Saturday, July 11, and Saturday, July 25, at 8.45 A. M., taking a train of elegant drawing-room cars at the station of the Boston & Lowell system of the Boston & Maine Railroad, Causeway street. The first stage of the journey leads to Montreal, where Sunday will be passed; and the journey thither will lie over the Boston & Lowell system, the Concord & Montreal Railroad, and the Canadian Pacific Railway. The latter line extends from Newport, Vt., to the Canadian metropolis. The leading cities and towns passed through on the way are Somerville, Woburn, and Lowell, Mass.; Nashua, Manchester, Concord, Tilton, Laconia, Lake Village, and Plymouth, N. H.; St. Johnsbury, Newport, and Richford, Vt., and Farnham and St. Johns, Province of Quebec. Dinner will be provided at the Pemigewasset House, Plymouth. The shores of Lake Winnipesaukee, the western section

of the Franconia Mountains, the Connecticut and the Passumpsic valleys, and Lake Memphremagog are the chief scenic features of interest. The approach to Montreal is over a magnificent steel bridge which stretches across the St. Lawrence from the Indian village of Caughnawaga to Lachine.

In Montreal.

The spacious and elegant Windsor Hotel will be our sojourning-place through Sunday and Monday, the overland journey being resumed late Monday afternoon. Among the churches worthy of attention are the French Cathedral of Notre Dame, which was built in imitation of its Paris namesake, and holds over 10,000 people, on Notre Dame street; the handsomely decorated Church of the Jesuits, on Bleury street; Christ Church Cathedral, on St. Catherine street; the beautiful Church of Notre Dame de Lourdes, on St. Catherine street; the ancient Church of Notre Dame de Bonsecours, on St. Paul street; and St. Peter's Cathedral, near Dominion square. Among the prominent public buildings are several bank edifices, the Canadian Pacific Railway offices, and the Post Office, on St. James street; the Court House and new City Hall, on Notre Dame street; the Bonsecours Market, on St. Paul street; Ste. Anne's Market, on Foundling street; the Custom House, at Foundling and Common streets; the Young Men's Christian Association Building, on Victoria square; and the Hotel Dieu, McGill College, College of Montreal, and the exhibition structures, near the mountain. The statue of Her Majesty, the Queen, which ornaments Victoria square; the Nelson monument, at the head of Jacques Cartier square, and the substantial docks, crowded with ocean steamers and sailing craft, are also objects of interest. The Grey Nunnery comprises an extensive group of buildings on Dorchester and Guy streets. The view from Mount Royal includes the entire city, the

river and its islands, the Victoria Bridge, and a large extent of country, with Belœil, Boucherville, and other distant mountains. To the list of prominent edifices should be added the Windsor Hotel, which is one of the finest establishments of its kind in America. There will be a carriage ride Monday morning, with visits to the principal points of interest in the city, the mountain, park, and the Grey Nunnery.

The Canadian Pacific Railway.

The great national highway of Canada, the latest American transcontinental railway, is a marvel in its way. It was built for a large part through a sparsely populated region, and under great difficulties; but, in spite of all, the road was completed five years in advance of the time limit fixed upon. The distance from Montreal to Vancouver is 2,906 miles; and the first through train from Montreal arrived at Port Moody, thirteen miles east of Vancouver, and then the Pacific Coast terminus of the line, July 4, 1886. The scheme of establishing some sort of means of communication through Canadian territory, from the Atlantic to the Pacific, was early considered, and a combined rail and water route was proposed in 1848. Large sums of money were expended, both by the Imperial government and Canada, in preliminary surveys, and as early as 1858 a corporation was chartered. These preliminary efforts resulted in little, and the present enterprise has been wholly the growth of more recent years. Sir John Macdonald, the able prime minister of Canada, has been a strong friend of the railway project from the first, and it was largely through his influence and aid that the great work was completed. It was mainly through his counsel that the line was made purely a national institution, its ownership being wholly in Canadian or British hands. Upward of $100,000,000 were expended upon the main line previous to the 1st of January, 1885, independent of $35,000,000 disbursed by the government. The road was really con-

structed in four sections, two by the company and two by the government. Section 1, from Callander to Port Arthur, was built by the company, and completed in May, 1885; section 2, from Port Arthur to Winnipeg, by the government, and completed in June, 1882; section 3, from Winnipeg to Savona's Ferry, by the company, and completed in September, 1885; and section 4, from Savona's Ferry to Port Moody, by the government, and completed in July, 1885.

Some of the eastern parts of the route were early in operation; but the section lying north of Lake Superior was one of the latest and, indeed, one of the hardest of all to build, rivaling in obstructions and requirement of skilful engineering the part of the road lying through the mountains of British Columbia. For some years the line into Winnipeg was operated in connection with steamers which plied between Port Arthur and Owen Sound. On the 11th of May, 1884, the road was opened to the summit of the Rockies, at Stephen, 122 miles west of Calgary. Although it was in reality wholly completed in the autumn of 1885, so that Her Majesty Queen Victoria sent a congratulatory message to the company on the 6th of November of that year, the nearness of the winter season led its managers to desist from working it through the mountain region until the following summer. The track-laying was carried out with great rapidity and in all weathers, some of the records being almost marvelous. On the 28th of January, 1885, nearly three miles of track were laid while the thermometer indicated a temperature of 40 degrees below zero. On another day nearly 12,000 feet of track were laid when the mercurial thermometer was below the registering point. In 1882 the average of the track laid on each working day was two and six-tenths miles, and on each of two days there were put down four and one-tenth miles. During the eight weeks ending Aug. 5, 1883, or in forty-eight working days, 166 miles of track were laid, exclusive of sidings. On each of two days in 1883, no

less than six miles of track were laid. More than 300 miles of the line were cut through solid rock. The track upon the prairie sections was raised above the level of the ground, with a result that the trains have met with little or no obstruction from snow at any season of the year. This plan suggested itself to the practical mind of President (then vice-president) W. C. Van Horne. The mountains were pierced by scores of tunnels, and innumerable rivers were crossed by iron or wooden bridges. There are iron bridges over 1,000 feet in length, and one bridge is 295 feet above the mountain stream it spans. No less than fourteen streams were diverted from their natural beds — in some cases by tunneling through the solid rock.

While the Lake Superior section was under construction, an army of from 10,000 to 12,000 men was employed on the work, with from 1,500 to 2,000 teams of horses. In winter this force of animals was augmented by about 300 trains of dogs. The Canadian Pacific system embraces much more than its main line, its eastern extensions reaching Quebec, Halifax, and Cape Breton, while numerous branches connect the trunk road with the chief American cities. On the main or transcontinental line, stations are located at nearly uniform distances of eight miles, and at alternate stopping-points station-houses and water tanks have been erected. Where towns or settlements were encountered, stations were established regardless of this system; but the number originally was so few that the same general plan was pursued throughout the line. At each of the alternate stations a passing track of 2,000 feet in length and a business track 1,000 feet long were built, and the intermediate stations were provided with side tracks 2,000 feet long. Divisional points, with train yards, engine-houses, coal sheds, etc., are located at intervals of 130 miles, and at alternate divisional points repair shops were established. The company owns the telegraph line as well as all other appurtenances of the road.

Canada Considered Geographically.

The prevalent idea regarding the extent of the Dominion of Canada, on the part of those persons who do not study geography,—and there are many Americans and some Canadians who do not,—is that it comprises only a narrow strip of territory lying along the St. Lawrence and the great lakes. Let us glance at the map, and see how near the truth this may be. The southern boundary of Canada strikes the 49th parallel west of the Lake of the Woods, being considerably deflected through its easterly extent and slightly at its western extremity. Everything on the American continent north of the 49th parallel, except Alaska, belongs to the Dominion. The area of the United States, inclusive of Alaska, is 3,510,978 square miles, and that of Europe, 3,756,000 square miles. Canada contains 3,519,000 square miles, inclusive of 140,000 square miles of water area, and is therefore larger by 8,022 square miles than the United States, and within 237,000 square miles of the area of all Europe. We are comparing simply the area of these great subdivisions of the world, not their relative standing in population or in resources. Of the seven Provinces (Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, and British Columbia), British Columbia is the largest, with an area of 341,305 square miles, while the districts and territories comprise no less than 2,585,000 square miles. In fact, the Dominion covers more than one-fourteenth part of the earth's surface, and constitutes 40 per cent of the empire. It is nearly thirty times as large as the whole United Kingdom. The Province of Ontario is the most populous and the wealthiest, notwithstanding the fact that both Montreal and Quebec lie within the neighboring Province of Quebec.

The entire population of Canada in 1881 was 4,324,810. The territories were at that time so sparsely populated that, if the land could have been distributed equally,

every settler would have had over 30,000 acres, while in the most thickly settled Province each person would have had nearly thirty-four acres. It is a fact worthy of note that, in our long transcontinental journey over the Canadian Pacific Railway, we are to traverse the four largest Provinces of the Dominion, and in addition the districts of Assiniboia and Alberta, which are divisional parts of the great Northwest Territory.

From Montreal to Winnipeg.

Entering our magnificent train of Canadian Pacific palace sleeping and drawing-room cars at the palatial Windsor street station, in Montreal, Monday evening, we set forth on our long railway journey towards the land of the setting sun. Not far from Montreal we strike the valley of the Ottawa River, which we ascend for nearly 300 miles, passing meanwhile through a farming and lumbering section. Ottawa, the Dominion capital, which is situated on a high bank of the river, 120 miles from Montreal, is passed in the night, as are also Carleton Junction, Almonte, Arnprior, Renfrew, Pembroke, and Chalk River, unimportant places, except in comparison with neighboring settlements. Pembroke has a population of 4,500.

Tuesday morning finds us in the vicinity of Mattawa, one of the main distributing points for the lumbering district of the upper Ottawa. At Callander, twenty-six miles from Mattawa, the old government railway lines which were taken by the company terminated, and here the construction of the Canadian Pacific Railway was begun. We are in the region of small lakes north of Lake Huron. Scores of these lakes are seen near the railway, and some of them would be considered of large proportions except in comparison with the chain of vast inland seas that line the American border. North Bay, a railway divisional point, is a port on Lake Nipissing, a body of

water fifty miles long and thirty miles wide. The waters abound with fish, and the neighboring forests with noble game. For some distance the railway skirts the north shore of the lake, farther on crossing the Sturgeon River, the principal source of supply for Lake Nipissing, next striking the valley of the Veuve River, which also flows into this lake. For a considerable distance east of Sudbury Junction, we are nearly at the height of land that divides the water shed of Lake Superior from that of Hudson Bay. At Meadowside we are on a reservation of the Nipissing Indians, and the neighboring station of Beaucage was named in honor of the chief of the tribe. At Sudbury, the Algoma branch, which aids in forming the St. Paul and Duluth routes, *via* Sault Ste. Marie, leaves the main line. Near Sudbury are extensive copper and nickel deposits. The settlements are now small, and are confined almost wholly to the railway line. The scenery is in some places very picturesque. Near Missanabie, where Dog Lake is crossed, a short portage connects the waters flowing southward into Lake Superior with those flowing northward into Hudson Bay. Furs are brought here from the far north for shipment.

Wednesday morning will find us on the north shore of Lake Superior, which is first seen at Heron Bay, 802 miles west of Montreal. For a distance of nearly 200 miles we skirt the rough and rocky shores of this great inland sea. The scenery is at all times interesting and often truly grand. The railway is carried along for much of the way well up on the rocky shelf above the lake, following, to a large extent, the irregular contour of the shore, which is indented by numerous bays. Abrupt headlands project into the lake, and in many places these required tunneling, while high bridges stretch across intervening ravines. The building of this part of the road involved immense expenditures of money, as the road-bed had mostly to be carved from the solid rock. Among the most important stations on the lake shore, east of Port

Arthur, are Jackfish, on a bay of the same name and a famous fishing-point; Schreiber, the railway headquarters, and so named in honor of Collingwood Schreiber, government engineer of railways, to whose skill the successful building of this great line is largely due; Rossport, Gravel River, and Nepigon. There is some picturesque scenery at the latter point, where the road crosses the Nepigon River on an iron bridge 800 feet long and eighty feet high. Lake Nepigon, which lies north of the railway, is forty or fifty miles across, and a noted fishing and trapping region.

Before we reach Port Arthur, Lake Superior is lost sight of for a little time, but only to re-appear amid the grand scenery of Thunder Bay. Port Arthur, formerly known as Prince Arthur's Landing, was settled about 1867, and is an important railway and steamship point in connection with the Canadian Pacific Company's traffic. There are here extensive docks, some of which belong to the railway company and some to private parties. The town is pleasantly situated upon the sloping shores, with an outlook upon the dark cliffs of Thunder Cape and Pie Island. It has a population of about 5,500, and is the largest place between Ottawa and Winnipeg. Railway time changes at this point from Eastern to Central standard, one hour slower; and here begins also the reckoning of time on the company's schedules by the twenty-four hour system, the hours being computed consecutively up to twenty-four o'clock.

Seven miles west of Port Arthur, 1,000 miles from Montreal, and two and a half miles from the lake, on the banks of the Kaministaquia River, lies the old Hudson Bay Company's post of Fort William, originally intended to be the Lake Superior terminus of the Canadian Pacific Railway instead of Port Arthur. The railway company makes the town one of its distributing points in connection with its lake traffic. Near the town rises McKay's Mountain, an abrupt and picturesque elevation. West of Fort William the road follows for some distance the old route mapped out by Professor

Dawson in the early days of the railway enterprise. The Kaministaquia, a rough and rapid stream which foams over its rocky bed in a very picturesque manner, is followed for ten miles, and then the road runs beside the Mattewan, one of its tributaries, until Sunshine Creek, a branch of the latter, is reached. Along these streams there is much pretty scenery. Fifty miles or so from Port Arthur the flat, elevated region which divides the waters of Lake Superior and Lake Winnipeg — or the St. Lawrence and Hudson Bay systems — is reached. In the section lying beyond here much difficulty was experienced in building the railway on account of "floating muskegs," a term which implies a vegetable and earth covering which has formed over a lake or morass. These "sink-holes" swallowed an enormous quantity of earth and rock.

Two hundred and seventy-three miles west of Port Arthur is Hawk Lake, and twenty-four miles farther is the old Hudson Bay Company's post of Rat Portage, which lies on the borders of the Lake of the Woods. Before the days of the railway, Rat Portage held an important position, for here only 300 yards divide the Lake of the Woods and Winnipeg River. This brought the place into the track of the early trappers and *voyageurs*. There exists through the great northern wilderness a chain of lakes and rivers which make possible, with small portages here and there, continuous navigation for hundreds and even thousands of miles. These great water highways were in the early days traversed by the aborigines, and later by the intrepid searcher after furs. During the building of the railway, also, these inland waters served a good purpose in aiding in the transportation of supplies. West of Rat Portage, the track is carried across several arms and bays of little lakes, and in places there were extensive "fills." Viaduct Lake is crossed by a causeway which took 500,000 cubic yards of earthwork. Near Selkirk, thirty-two miles from Winnipeg, the road approaches Red River; and the east bank of this important stream is followed to that city, where the river is

crossed by a substantial bridge. Selkirk and some of the neighboring stations are near the site of one of Lord Selkirk's early colonies.

Winnipeg.

We shall reach Winnipeg Thursday noon and remain several hours, sufficiently long to gain a glimpse of the really handsome city. Winnipeg is the largest and most important place upon the whole line between Montreal and the Pacific Coast, except Ottawa. It is situated at the confluence of the Red River and the Assiniboine, and under the name of Fort Garry was long the headquarters of the Hudson Bay Company. It is the capital of Manitoba, and with a population of about 28,000 takes rank as the seventh or eighth city in the Dominion in point of size. It has broad and regular streets, and some of its public edifices and business blocks are notably handsome. The City Hall is a fine building, and there are few larger or better appointed business establishments on the American continent than the new stores of the Hudson Bay Company. It is a pity, however, that nearly all traces of the quaint old block edifices which formerly served this great trading corporation for its offices, magazines, and fortifications have been obliterated. The headquarters of the company are maintained here. Mr. Wrigley, its chief commissioner, resides in Winnipeg; and its outlying posts, extending to the Arctic Ocean, are supplied from this point. Not far from the Hudson Bay Company's headquarters are the buildings occupied by the provincial government, including the lieutenant-governor's residence, the Parliament House, and the Department of Agriculture. There is also a large drill shed in the government park; in front of the City Hall is a handsome monument commemorative of the valor of the Canadian soldiers who fell in the Northwestern rebellion. Across the Red River lies the French town of St. Boniface, containing the Cathedral, the official residence of Archbishop Tache (the head of the Roman Catholic Church in the

Northwest), and several important denominational schools. The chief workshops of the Canadian Pacific Railway between Montreal and the Pacific are at Winnipeg, and the train yards contain more than twenty miles of sidings.

Western Manitoba.

West of Winnipeg a richly productive wheat region is traversed. It is an extension of the great wheat basin of North Dakota, and reaches, in fact, many hundred miles north and northwest of the Canadian Pacific Railway. In the valley of the Assiniboine, the swelling prairie is covered with fields of grain, and farmhouses dot the landscape. At the market towns, chief among which are Portage la Prairie and Brandon, huge elevators are seen beside the track. From the former place the Manitoba & Northwestern Railway diverges. Another important wheat-shipping point is the little station of Carberry. Brandon, which is situated at the crossing of the Assiniboine River, is the market town for the country north to Minnedosa and south to the Turtle Mountains. It is a lively, flourishing place of between 5,000 and 6,000 inhabitants. At this point railway time changes to Mountain standard, which is one hour slower than Central standard.

Assiniboia and Alberta.

Moosamin, 1,642 miles west of Montreal and 408 miles west of Winnipeg, is the first town in the district of Assiniboia. It is the station for the Fort Ellice and Moose Mountain sections. Assiniboia is one of four provisional districts, constituting the great Northwest Territory, the others being Alberta, Saskatchewan, and Athabasca. Of these, Athabasca is the largest, having 122,000 square miles, Saskatchewan standing next with 114,000 square miles, Alberta third with 100,000 square miles, while

Assiniboia has a domain of 95,000 square miles. This latter district and Alberta lie along the American border. The valley of the Qu'Appelle is in the district of Assiniboia, being on the second plateau, or steppe of the continent, reaching from the Red River to the Rocky Mountains.

About ten miles south of Wapella station is the successful Benbecula colony, settled by the crofters from the estate of Lady Gordon-Cathcart. At Indian Head are the headquarters of the celebrated Bell Farm, the extent of which is no less than 64,000 acres, or 100 square miles. The town of Indian Head itself lies within the farm boundaries. Major Bell established his farm in 1882, at which time he was 200 miles from the nearest railway station. Here wheat cultivation is prosecuted on the same stupendous scale as on the bonanza farms of North Dakota. This station is also the supply depot for the Qu'Appelle Indian agency. The town of Qu'Appelle, the shipping point of the remainder of the valley, lies eleven miles beyond. Regina, the future capital of Assiniboia when this and the neighboring districts are converted into provinces, but at present the capital of the whole Northwest Territory, is 1,781 miles from Montreal. Here are the Indian offices and the headquarters of the mounted police, a uniformed force of 1,000 men that exerts a wholesome influence, not only in preventing smuggling from across the United States border, but also in preserving order among both Indians and whites throughout the territory. Recognizing the fact that whiskey is one of the prime evils in a new country, its importation and sale are rigidly prohibited. Liquor selling to the Indians is an offence that brings quick punishment, and there is not an open saloon along the entire line of the railway within the Northwest Territory — a state of things that contrasts oddly enough with what is seen along the railway lines in Montana, Idaho, New Mexico, and Arizona. There is an entire absence of the rough and reckless element invariably seen around

the American railway stations of the far west. It is made evident in many ways that, when the farmer comes to town, there is something else to engage his attention than the drinking-shop. At every important station one or more of the red-coated officials enter the cars to carefully inspect all incoming passengers, with a view to detecting any infringement of the regulations concerning the sale of intoxicating liquors.

As to Indians, there are not great numbers seen along the line of the railway, although there are several reservations near at hand. Those who are visible are mainly Crees and Blackfeet. The numbers of the Indians hereabout are less than in Montana, although the two tribes mentioned have several thousands each.

Friday morning will find us yet upon the broad western plains. Moosejaw and Swift Current are railway divisional points. From the latter, stages depart for Battleford and other far northern points. At Maple Creek is another post of the mounted police. This is also a shipping-point for the extensive cattle and horse ranges in the Cypress Hills, and an agency for the Blackfeet Indians. At Medicine Hat we cross the South Saskatchewan by a steel bridge 1,010 feet long. Coal and iron are abundant in this neighborhood; and from Dunmore, a station nine miles east of Medicine Hat, an important branch line leads to extensive collieries. The coal is of bituminous quality. Medicine Hat is a railway divisional point with repair shops, and acquires additional importance from being the centre of cattle and coal interests. There is a pretty garden here in front of the station buildings. From this point the railway trends northwesterly, following the banks of Bow River, a tributary of the Saskatchewan. Here the buffalo formerly roamed in great numbers, and here, too, the Crees and the Blackfeet fought some of their severest battles. At Langevin, where we enter Alberta, are wells of natural gas. Calgary, which is situated near the junction of the Bow and Elbow Rivers, is an important town of over 2,000 inhabitants

and the capital of Alberta. It is the centre of an extensive grazing district. The land hereabouts, and at many points east, is well adapted to certain kinds of farming, a fact that the experimental farms of the railway company long ago established, but the region is given over chiefly to cattle raising.

The Approach to the Rocky Mountains.

The Rocky Mountains may be seen from points east of Calgary, but the most satisfactory views are had farther west. Beyond that place we enter the region of the foothills. From the top of the first terrace a fine view is had of the great continental wall rising in successive tiers of sculptured heights. We come to another Indian reservation,— the Stony tribe,— and a glimpse is had of their agency village and of some of their well-tilled farms. The Kananaskis River is a mountain stream emptying into the Bow, and along both streams are cascades and falls. Our train will halt sufficiently long for us to visit the chief of these. There are occasional glimpses through the trees of lofty, snow-clad summits, and we realize that we are approaching the heart of the mountains. The gap is a rocky gateway which gives egress to the Bow River; and beyond it the track turns northward and ascends the long valley between the Fairholme range, on the right, and the Kananaskis range, opposite. On the right the hills are broken into fantastic masses and castellated heights. On the left are lofty, snow-laden promontories, rising thousands of feet, and penetrated by enormous alcoves. As the train speeds on, new forms appear, and the scene changes to fresh pictures of grandeur. At Canmore, another division headquarters, we are at an altitude of 4,230 feet. The three lofty peaks on the left are the Three Sisters, and the Wind and Pigeon Mountains are seen beyond. On a hill behind the station stands a group of isolated monumental conglomerate rocks, curiously weathered from the softer soil.

Says Lady Macdonald, who has written enthusiastically of the scenery along this part

of the line: "Very striking and magnificent grows the prospect as we penetrate into the mountains at last, each curve of the line bringing fresh vistas of endless peaks rolling away before and around us, all tinted rose, blush pink, and silver, as the sun lights their snowy tips. Every turn becomes a fresh mystery, for some huge mountain seems to stand right across our way, barring it for miles, with a stern face frowning down upon us; and yet a few minutes later we find the giant has been encircled and conquered, and soon lies far away in another direction. Mount Cascade is perhaps one of the most remarkable of these peaks. Approaching its perpendicular, massive, precipice-front, streaked with a thousand colors, which glow in the sunshine, we half shrink from what seems an inevitable crash. From this precipice falls a narrow cascade, making a leap of about 1,800 feet. Surely it will presently burst over us! But no; a few minutes later Mount Cascade has mysteriously moved away to the right, and its silver waterfall soon gleams in the distance."

The Hot Springs of Banff and the Canadian National Park.

At the station of Banff, 2,342 miles west of Montreal and thirteen miles from Canmore, our train halts, in order that we may pay a visit to the famous hot springs which are near at hand. Here in the heart of the mountains, amid scenery of the grandest and most impressive character, the Dominion government has made a reservation of a tract twenty-six miles long and ten miles wide, inclusive of a remarkable group of hot sulphur springs, as a national park. Large sections of the valleys of the Bow, Spray, and Cascade Rivers, Devil's Lake, and several noble mountain ranges are also embraced in this picturesque domain. A magnificent hotel, which cost over $300,000 and contains every modern luxury, including baths supplied from the hot springs, has been erected by the railway company, and roads and bridle paths to the various points

of interest in the vicinity have been constructed. The huge mass northward of Banff is Cascade Mountain (9,875 feet). Eastward are Mount Inglismaldie and the heights of the Fairholme sub-range, the chief of which, seen from here, is Peechee, with an elevation of 10,000 feet. Behind this range lies Devil's Head Lake. Up the Bow River westward tower the distant, snowy, central heights of the main range about Simpson's Pass, most prominently the square, wall-like crest of Mount Massive. The springs are at different elevations upon the eastern slope of Sulphur Mountain, the highest being 700 feet above the Bow River. In one locality is a pool inside a dome-roofed cave. The more important springs have been improved by the government, and good roads lead to them from the hotel.

From Banff to the Summit of the Rockies.

After a two days' rest at Banff we resume our westward journey through the mountains. Upon leaving Banff, the railway rejoins the Bow, and follows it up through a forest-clad valley. The view backward is very fine. The Vermilion Lakes are skirted, and in front is had an excellent view of Mount Massive and the snow peaks farther west. Then a sharp turn discloses in front of us the great heap of snowy ledges forming the eastern crest of Pilot Mountain. Hole-in-the-Wall Mountain is passed upon the right; and then, a little beyond, where the park is left at its western corner, Castle Mountain looms up ahead on the right, a sheer precipice of 5,000 feet. After passing Castle Mountain, we come upon still wilder scenes. On the right is a bare, rugged, sharply serrated sub-range called the Sawback, and the lofty Bow range fronts the valley on the left. At first enchanting glimpses only are caught through the trees as one looks ahead; but before Eldon is reached, the whole long array is in view. Looking back, the central peak of Pilot Mountain is seen like a leaning

pyramid, and next to it is the less lofty but imposing cone of Copper Mountain. Westward of the latter the gap of Vermilion Pass opens up a vista of distant, snowy peaks. West of the entrance into Vermilion Pass stretches the long, rugged, wall-like front of Mount Temple; and beyond it, standing supreme over this part of the range, is the prodigious, isolated, helmet-shaped mountain named Lefroy — the loftiest and grandest in this whole panorama.

At Laggan we are at an altitude of 4,930 feet, or 430 feet higher than at Banff. The railway here leaves the Bow and ascends a tributary from the west, which courses down through a gap in the Bow range. Looking upward through this gap towards Bow Lake and the huge peak of Mount Hector, a view is obtained of the first of the great glaciers. It is a broad, crescent-shaped river of ice, the upper end being concealed behind the lofty yellow cliffs that hem it in. You seem to be almost on a level with it, and at the distance of only a few miles; but it is 1,500 feet above the level of the track, a round dozen miles away, and almost inaccessible by reason of the ravines, rocky precipices, and forests which intervene.

At Stephen, which, like the neighboring noble peak, was named in honor of Sir George Stephen, Bart., formerly president of the Canadian Pacific Railway Company, we are at an elevation of 5,296 feet, and at the summit of the Rocky Mountains. Mount Stephen towers 8,240 feet above our heads, or over 13,500 feet above the sea level, a bold, precipitous peak of very striking form. High, towards its castellated summit, are two glaciers, one being seen upon the eastern approach and the other upon passing its massive front. These great ice streams overflow, as if from the rim of some mighty beaker. Near the mountain, on the northeast, is a great column of rock perched high in air like a monument reared by Titans. On the opposite side of the pass is a mountain of lesser elevation than Mount Stephen, yet of grand outline. The summit of the

pass is found to be an almost level space, about four miles in length, with three lakes, the first of which is Summit Lake, the source of Summit Creek, along which the railway has ascended the last slope. The middle one is Link Lake, which seemingly has neither inlet nor outlet, but whose waters might be carried either to the Atlantic or the Pacific. The third and largest is the source of the Kicking Horse River, a rapid, impetuous stream, which starts with a width of fifty feet, and flows down into the Columbia River. Near Mount Stephen is the dark, angular peak of Mount Field, and the spires of Cathedral Mountain are also occasionally seen. At the summit we cross from Alberta into the Province of British Columbia. At this point we are 2,387 miles from Montreal and 519 from Vancouver.

Down the Gorge of the Wapta, or the Kicking Horse River.

At Field (named in honor of Cyrus W. Field), ten miles beyond Stephen, is a charming little hotel managed by the railway company — the Mount Stephen House. Here the west-bound passengers usually eat breakfast, the dining-cars being dispensed with during the run over the mountains. A peculiarity of the ascent of the Rockies from the plains to the point of highest elevation above sea level, is that it is almost imperceptible, being continued over hundreds of miles at an average of not more than fifteen feet to the mile. Then, suddenly on the western slope, the descent from the Rockies into the valley, or gorge, between that range and the Selkirks, is made in one grand downward plunge. The descent is by a grade of 234 feet to the mile, and involves some of the most daring engineering, as well as the finest appliances of train running, to be found upon any railway in the world. Although the total length of the Wapta, or Kicking Horse River, is only forty-seven miles, its descent is 2,800 feet. Down beside this rapid stream the railway twists and turns, now far above its turbu-

lent waters, and then at its level, while on every side are new and startling pictures of grandeur. Looking down the valley from Field, the Otter-tail Mountains are seen on the left, and the Van Horne range on the right, with Mounts Deville and King as the most prominent peaks of the latter. Two miles beyond Field, very lofty, glacier-bearing heights look down from the north. At Leanchoil the Beaverfoot River enters, and looking southward the long array of peaks belonging to the Beaverfoot Mountains is seen. The lower cañon of the Kicking Horse, near Palliser, is narrow, and the mountain walls are very precipitous. It is a vast chasm, through which the railway had to dispute the right of way with the tumultuous stream. With the towering cliffs almost shutting out the sunlight, and the roar of the river and the train increased a hundred-fold by the echoing walls, the passage of this terrible gorge will not soon be forgotten. At Golden, a mining-town forty-four miles west of the summit and 2,746 feet below it, we emerge from the cañon. The broad river ahead of us is the Columbia, moving northward; and the supremely beautiful mountains beyond are the Selkirks, rising from their forest-clad bases, and lifting their ice-crowned heads far into the sky. From Golden to Donald, seventeen miles, the railway follows down the Columbia on the face of the lower bench of the Rocky Mountains; the Selkirks all the way in full view opposite, the soft green streaks down their sides indicating the paths of avalanches. Donald is the junction point of the Western and Pacific Divisions, and here railway time again turns back one hour, so as to conform to the Pacific standard.

Through the Picturesque Selkirks.

We have thus far passed through a single mountain range — the Rocky Mountains proper. Three more are to be pierced — the Selkirks, Gold, and Cascade, or Coast

ranges — before the shores of the Pacific are reached. Leaving Donald, the railway crosses the Columbia to the base of the Selkirks. A little farther down, the Rockies and the Selkirks, crowding together, force the river through a deep, narrow gorge, the railway clinging to the slopes high above it. Emerging from the gorge at Beavermouth, the line soon turns abruptly to the left, and enters the Selkirks through the Gate of Beaver River. A little way up the Beaver, the line crosses to the right bank, where, notched into the mountain-side, it rises at the grade of 116 feet to the mile; and the river is soon left 1,000 feet below, appearing as a silver thread winding through the narrow and densely forested valley. Opposite is a line of huge tree-clad hills, occasionally showing snow-covered heads above the timber line. From Six Mile Creek station one sees ahead, up the Beaver valley, a long line of the higher peaks of the Selkirks, culminating in an exceedingly lofty pinnacle, named Sir Donald, with which a more intimate acquaintance will be made at Glacier House. Again, from Mountain Creek Bridge, a few miles beyond, where a powerful torrent comes down from high mountains northward, the same view is obtained, nearer and larger. Eight peaks can be counted in a grand array, the last of which is Sir Donald, leading the line. A little farther on, Cedar Creek is crossed, and not far west of it is a high bridge spanning a foaming cascade, from which one of the most beautiful prospects of the whole journey is to be had. This spot has been named "The Surprise." At Bear Creek station the line leaves the Beaver, and turns up Bear Creek. There are numerous bridges across the ravines, which are generally the beds of mountain torrents. The greatest of these structures crosses Stony Creek — a noisy rill flowing at the bottom of a V-shaped channel, 295 feet below the rails. Beyond Stony Creek Bridge the gorge of Bear Creek is compressed into a vast ravine between Mount MacDonald, on the left, and the Hermit, on the right. The former towers a mile and a quarter above the railway in

almost vertical steeps. Two miles beyond Rogers's Pass, and at an altitude of 4,300 feet, we reach our highest point in the Selkirks. This pass was named in honor of Major A. B. Rogers, who discovered it in 1883. The pass lies between two lines of huge, snow-clad peaks. The one on the north forms a prodigious amphitheatre, under whose parapet, 7,000 or 8,000 feet above the valley, half a dozen glaciers may be seen at once, and so near that their shining green fissures are distinctly visible. On the south stretches the line of peaks connecting MacDonald with Sir Donald. The pass has been reserved by the government as a national park.

Leaving the summit and curving to the left, the line follows the slope of the summit peaks, of which Sir Donald is the chief. At the right is the deep valley of the Illecilliwaet, which makes its way westward by a devious course among the lofty peaks. Far below, and for many miles away, can be traced the railway, seeking the bottom of the valley by a series of extraordinary curves, doubling upon itself again and again.

The Great Glacier of the Selkirks.

Directly in front of us is the Great Glacier of the Selkirks. Passing a long snow shed (not through it, for an outer track is provided so that the summer scenery may not be lost), a sharp curve brings the train in front of the vast gleaming sea of ice. Glacier House, which stands near the track, is another of the railway company's delightful little hotels, which, with its characteristic surroundings, seems more like a Swiss chalet than an American structure. Arriving here early Monday afternoon, we shall remain until the early morning of the ensuing day, and thus time will be had for an exploration of the glacier, which is between one and two miles away, and may easily be reached. A good path has been made to the great ice field, which is miles

in extent and several hundreds of feet thick. The outlook from Glacier House is very fine. Sir Donald, an abrupt peak, rises to a height of more than a mile and a half above the track. This stately monolith was named for Sir Donald Smith, one of the chief promoters of the Canadian Pacific Railway. To the left are two or three sharp peaks, second only to Sir Donald. Rogers's Pass and a snowy mountain beyond (Grizzly Peak and a member of the Hermit range) are also in view. To the left is Cheops, and far down among the trees the Illecilliwaet glistens. A shoulder of Ross Peak is visible at the left of Cheops, over the slopes of the mountain behind the hotel. A glacial stream has been caught, and made to furnish fountains about the house. Game is very abundant throughout these lofty ranges, big-horn sheep, mountain goat, and bears being foremost in the list.

Westward Across the Columbia Again and through the Gold Range.

Resuming our westward journey, we descend the Selkirks beside the winding Illecilliwaet through scenes of surpassing beauty. The stream is charged with glacier mud, but soon becomes clear, and presents many picturesque features in the shape of gorge and waterfall. The most notable of the former is Albert Cañon, where the track runs near the brink, while the river boils and surges through a narrow space 300 feet below. Balconies have here been built to enable the passengers to safely view this gorge. A short distance below Glacier House is the Loop, where the railway describes a succession of bewildering twists and curves. The mountain views are often superb, and every turn of the devious pathway brings fresh scenic marvels. The Cascade of Tears is a beautiful fall on the left-hand side of the railway.

The second crossing of the Columbia is at Revelstoke, 2,527 miles from Montreal. We have traveled across the mountainous peninsula formed by the great bend of the

Columbia, a distance of seventy-eight miles, while the river flows over 200 miles and descends 1,050 feet. A dozen miles below Revelstoke the great stream expands into the Arrow Lakes. The bridge, which here carries both the railway and a wagon-way, is 800 feet long. The western approach is over a long piece of trestlework, so that the entire structure may be said to be seven eighths of a mile in extent.

From the Columbia the road ascends by an easy grade to Eagle Pass, in the Gold or Columbia range, a gap so deeply cut that Summit Lake is only 525 feet above the elevation of the Columbia at Revelstoke (1,475 feet). Lofty mountains rise on either side, the tallest of which is Mount Begbie, a glacier-bearing peak, which is seen on approaching Revelstoke. The main feature of the scenery in the Gold range is a succession of beautiful little lakes. Four of these — Summit, Victor, Three-Valley, and Griffin — follow in close succession, each occupying the entire width of the valley, and forcing the railway into the mountain-sides. The valley is filled with a dense growth of immense trees,— spruce, Douglas fir, hemlock, cedar, balsam, and many other varieties,— veritable giants of the forest. At Craigellachie, twenty-eight miles from Revelstoke, the last spike was driven in the Canadian Pacific Railway, Nov. 7, 1885.

The Lake Region and the Thompson River Cañons.

West of the mountains lies the interior lake region of British Columbia. The Eagle River leads us down to the Great Shuswap Lake, so named from the Indian tribe that lived on its banks, and who still have a reservation here. The railway crosses an arm of the lake at Sicamous Narrows, and then encircles the southern sweep of Salmon Arm. From Notch Hill a fine view is had across this beautiful body of water. Descending westward, we reach the Thompson River valley. Kamloops, the principal town of this region, is situated at the junction of the north fork of the Thompson and

the main stream. The name is of Indian origin, and means a river confluence. Just below the town the river widens out into Kamloops Lake, a hill-girt sheet of water, along the southern shore of which the railway runs about twenty miles. At Savona's Ferry the lake ends, the mountains draw near, and the series of Thompson River Cañons is entered, leading westward to the Fraser River. At this point the railway constructed by the company ends, and the section of 215 miles built by the government, and given to the company as a bonus, begins. At Spence's Bridge, seventy-three miles from Kamloops, the old wagon road to the Cariboo gold country crosses the river.

Through the Fraser River Cañons and the Last Mountain Range.

At Lytton, a small trading town where ranchmen and Indians appear in numbers, the cañon suddenly widens to admit the Fraser, the chief river of the Province, which comes down from the north, between two great lines of mountain peaks. The scenery becomes even wilder than before. Six miles below Lytton the train crosses the Fraser by a steel cantilever bridge, high above the water. The line follows the right wall of the cañon from this point onward. The roadway in many places was carved from the solid rock, the river being left surging and swirling hundreds of feet below. The old government road attracts the attention of the railway passenger all along the Fraser and the Thompson. Six miles below Cisco, where it follows the cliffs opposite the railway, it is forced to a height of 1,000 feet above the river, and is pinned by seemingly slender sticks to the face of a gigantic precipice. The cañon alternately widens and narrows. Indians are seen on projecting rocks, down at the water's edge, spearing salmon or scooping them out with dip nets, and in sunny spots the fish are drying on poles. Chinamen, too, are busy on the sand or gravel bars, washing for gold;

and Indian villages, with their barbarously decorated burial-places, alternate with the groups of Chinese huts. North Bend is a railway divisional point, and here has been located another of the company's inviting little hotels. At Boston Bar, four miles below, the principal cañon of the Fraser begins; and thence to Yale, a distance of twenty-three miles, the scenery is both interesting and startling. The great river is forced between vertical walls of black rocks, and foams and roars against impending masses. The railway is cut into the cliffs 200 feet or more above, and the jutting spurs of rock are pierced by tunnels in quick succession. At Spuzzum the government road is brought across the chasm on a graceful suspension bridge to the more tenable ground of the west wall.

Ten miles below Spuzzum the enormous cliffs apparently shut together, and seem to bar the way. The river makes an abrupt turn to the left; and the railway, turning to the right, disappears in a long tunnel, only to emerge into daylight at Yale. Yale is at the head of navigation, and an outfitting point for miners and ranchmen bound northward. The mountains rise abruptly on all sides; and in the Hope Peaks, in the southwest, are silver deposits. Below Yale the cañon widens, and is soon succeeded by a broad, level valley, with rich soil and heavy timber. The rude Indian farms give place to wide, well-cultivated fields, which become more and more frequent, and vegetation of all kinds rapidly increases in luxuriance as the Pacific shore is approached. Agassiz, overlooked by Mount Che-am, is the station for Harrison Springs, which are situated near Harrison Lake, five miles north. A few miles beyond Nicomen Mount Baker, which lies just across the American border in the new State of Washington, comes into view on the left. Farther on, at the crossing of the Stave River, a still finer view of this noble peak is had. At Mission is an important Roman Catholic Indian school. At New Westminster Junction a branch

track diverges eight miles to New Westminster. Port Moody, at the head of Burrard Inlet, was for a time the terminus of the railway. From here to Vancouver, thirteen miles, the railway follows the south shore of the inlet, and the outlook is most delightful. Snow-tipped mountains, beautiful in form and color, rise opposite, and are vividly reflected in the mirror-like waters. At intervals along the heavily wooded shores are mills and villages, with ocean steamships and sailing craft loading with sawn timber for all parts of the world. On the other hand, and towering high above, are gigantic trees, twenty, thirty, and even forty feet around. Passing Hastings, the new city of Vancouver soon appears.

Vancouver.

This city, which has risen like magic at the terminus of the Canadian Pacific Railway, has a population of about 16,000. Until May, 1886, its site was covered with a dense forest. From May to July its growth was very rapid; but in July a fire, spreading from the surrounding forest, swept away every house but one in the place. The city has been rebuilt in a substantial manner, and now contains many fine buildings, one of the chief edifices being a hotel owned by the railway company. The city fronts on Coal Harbor, a widening of Burrard Inlet, and extends across the peninsula to English Bay. A steamship line plies regularly from Vancouver to China and Japan, and there is frequent service by steamer with Victoria, Port Townsend, Seattle, Tacoma, Nanaimo, etc. The outlook from Vancouver is magnificent, comprising many mountain peaks on the mainland and on Vancouver Island, with fine prospects across the Strait of Georgia. Stanley Park is a magnificent forest tract containing many mammoth trees. There is a drive through the park commanding many fine water views. The party will reach Vancouver Tuesday evening, and remain upon the cars until morning. The forenoon may then be spent in Vancouver.

From Vancouver to Victoria.

Early Wednesday afternoon, we shall go on board one of the steamers of the Canadian Pacific Navigation Company's line and proceed to Victoria, about eighty miles distant. Six or seven hours will be occupied in this voyage, which lies across the Strait of Georgia and among the islands southward. The views from the steamer's deck of the mountain peaks among which we have been journeying, and of others on the island of Vancouver, are fine. The islands, with their beautifully rounded shores and graceful contours of upland and lowland, also enter into every picture.

Victoria, the Island Capital of British Columbia.

The capital of British Columbia is charmingly situated at the southeastern extremity of Vancouver Island. The city contains about 15,000 inhabitants. Fort Victoria, a subsidiary depot of the Hudson Bay Company,—the chief depot then being at Fort Vancouver, on the Columbia River,—was established in 1843; and in 1848, at the time of the "Cayuse war," it became an important position for sending supplies to the interior. In 1858, about the time of the gold-mining excitement on the Fraser and the Skagit, New Georgia and New Caledonia, as the main coast and interior had previously been designated, became by royal edict British Columbia, and in 1866 the colony of Vancouver Island was united therewith. Fort Victoria, meanwhile, became the city of Victoria. The place presents many interesting features to the stranger. The government buildings, five in number, and built in Swiss style, comprising the Parliament House, government printing-office, land and works departments, government offices, messenger's residence, and the Provincial Museum, occupy a prettily adorned square just across James's Bay. In front of these is a granite shaft erected to the memory of Sir James Douglas, the first governor of the colony. There is a

populous "Chinatown," and, mingled with the Mongolians on the streets, are many Songhish Indians. There is a reservation of this tribe near the city. The view from the upper streets or from the summits of Beacon or Church hills is very fine, commanding, as it does, a large expanse of water, the Olympic range across the Strait of Juan de Fuca, and the massive form of Mount Baker in the east. There are also several very picturesque elevations on the island within a few miles of the city. Esquimalt, the chief naval station for Her Majesty's ships on the Pacific, is three and a half miles from the city, and is reached by a splendid road. Here are found a magnificent harbor, a government arsenal, and an extensive dry-dock. The dry-dock, which is 400 feet long, sixty-five feet wide, and twenty-six feet deep, cost $250,000. The Gorge is a rock-bound channel, several miles up an inlet of the sea, where at every change of tide the water rushes through impetuously.

The Alaska Voyage.

The party will go on board the Alaska steamer "The Queen," at Victoria, Wednesday evening. This vessel is one of the finest of the Pacific Coast Steamship Company's fleet, and the fact that she is under the command of Captain James Carroll, will render the voyage especially desirable. "The Queen," already one of the most staunch, comfortable, and best-appointed vessels in the Pacific Coast service, has been put in the finest possible condition for Alaska tourist travel. New and commodious staterooms have been placed upon the upper or hurricane deck, and furnished in the most comfortable and elegant style. These rooms, which are intended for two passengers, each having only two berths, have been reserved for the members of our parties exclusively, together with other deck-rooms of the best class. The location of these rooms upon deck, with a light and airy promenade upon all sides, renders them especially

desirable for sight-seers. Captain Carroll's intimate knowledge of all the attractive points upon the Alaska route, and the fact that the voyage is to be devoted to the service of the passengers wholly, and not to freighting purposes (freight being carried upon other steamers), will serve to make the trip enjoyable in the fullest degree.

Along the East Coast of Vancouver Island.

Vancouver Island stretches along the coast of British Columbia 200 miles, in a northwesterly direction, and our course lies through the inward channels and straits. From Victoria we turn northward through Haro Strait, which, with the San Juan Islands, lying easterly, has become historic through the contention of the United States and Great Britain over the international boundary, trouble having arisen in consequence of the somewhat ambiguous phraseology of an old treaty. The question was whether this channel or Rosario Strait, one of the lesser channels lying farther eastward toward the mainland, was meant as the boundary line. The emperor of Germany, then king of Prussia, to whom the interpretation of the treaty was left, in 1872 decided in favor of Haro Strait, and thus threw into the United States the valuable group of islands referred to. The view from the steamer's deck is superb. Mount Baker, the noble Olympian range south of Victoria and across Juan de Fuca Strait, hundreds of other peaks on the islands and the mainland, and even distant Mount Tacoma, when the atmosphere is exceedingly clear, may be seen; while the picturesque shores of the archipelago, through which we are passing, form ever-changing visions of beauty. Emerging from Haro Strait, probably through Active Pass, we are for a time in the broader waters of the Strait of Georgia, and skirting Galiano, Valdes, and Gabriola Islands, which lie along the coast of Vancouver.

The passengers are quite likely to awaken the succeeding morning near Nanaimo,

an old Hudson Bay Company's post seventy miles north of Victoria. Near that town are the Wellington coal mines, where our steamer will probably stop for fuel on her southward trip, coal for the present voyage having been obtained previous to our embarkation. The mines here are of immense value, as the coal is of unsurpassed quality for steaming purposes. Their discovery, by the late Richard Dunsmuir, was wholly accidental. He chanced to be riding a horse down through the forest, when the animal stumbled over an outcropping of lignite. A partner who originally put in £1,000 to develop the property, later on sold his interest to Mr. Dunsmuir for £150,000, and another who invested the same amount, withdrew at the end of ten years with £50,000. A railway runs from Victoria to Nanaimo and the Wellington mines, and the telegraph reaches thus far; but beyond, the traveler is shut out from the happenings in the world at large. For the once we may give ourselves over to the full enjoyment of scenery unrivaled in any part of the globe. We continue through the Strait of Georgia, which narrows when Lasqueti and Texada Islands are reached.

The view of the mountains, especially of those on the mainland, is superb. Long lines of snow peaks, tossed into fantastic forms and gleaming in the declining sun like silver and gold, fill the eastern horizon. There is a series of wonderful fiords, penetrating the coast in some instances for 100 miles or more north of Burrard Inlet, known successively as Howe Sound, Jervis Inlet, Desolation Sound, Toba, Bute, Loughborough, Knight, Kingcombe, Seymour, and Belize Inlets. These are invariably lined with high mountains, the waters at their foot being of untold depths.

About Jervis and Bute Inlets are peaks between 8,000 and 9,000 feet high. A group of needle-like spires near the latter, 8,100 feet high, is especially notable. The whole region is uninhabited except by a few scattered Indian tribes; and the same may almost be said of the northwestern two thirds of Vancouver Island, where, in fact, no

signs of human life are discernible except around a few saw mills, salmon canneries, and two or three native villages. We enter Discovery Passage, the first of the river-like channels through which we are to journey for many hundreds of miles, passing on the right Cape Mudge, and from an expansion of the passage caused by an indentation of the Vancouver shore, known as Menzies Bay, pass into the famous Seymour Narrows. Through this contracted channel the tides rush with great velocity, sometimes running nine knots an hour. The steamer is so timed as to go through the Narrows with a favoring tide. Discovery Passage, and also Johnstone Strait, which is beyond, lying between Vancouver Island and the mainland, are lined with mountains of from 3,000 to 6,000 feet elevation. Farther inland on both sides are still higher peaks, of which occasional glimpses are had. In the interior of the island are mountains over 8,000 feet high. Down many of the heights cascades are seen coursing, especially after a recent rain.

Johnstone Strait is fifty-five miles in length, and is succeeded by a lesser stretch of water called Broughton Strait, which lies between Vancouver and Malcolm Islands. On Cormorant Island, opposite the Nimkeesh River, is the Indian village of Alert Bay and also a cannery. At the south extremity of the town is a native burial-ground, where the graves are quaintly decorated with flags and rude carvings. These Indians are mainly of the Nimkeesh tribe, although there are also some of the Kwawkewlths, who come chiefly from Fort Rupert, above, towards the head of Vancouver Island. The latter are among the most degraded people living on the coast, and, notwithstanding the efforts of the missionaries, remain to a large extent in paganism. The conical peak seen on Vancouver Island, and long visible, is Mount Holdsworth (3,040 feet). When the open water is reached north of Broughton Strait, Fort Rupert, an old Hudson Bay Company's post, and now an Indian agency, is seen on the left.

Above Vancouver Island.

We now leave Vancouver Island, its northern and northwesternmost capes, Commerell and Scott, with the string of Scott Islands, being seen at the left after Queen Charlotte's Sound is entered. This body of water, less than forty miles in extent, and the still smaller Milbank Sound, farther north, are almost the only places where, even under the proper conditions for such things, the steamer is exposed to the roll of the sea, unless it becomes necessary to follow an outside course near Sitka instead of threading some of the narrow and intricate passages. We look westward over the broad expanse of the Pacific Ocean. The vessel soon passes from Queen Charlotte's Sound under the lee of Calvert Island, and enters the landlocked channel of Fitzhugh Sound. Here again we have superb scenery on either side, the mountains of Calvert Island culminating in an exceedingly sharp peak known as Mount Buxton (3,430 feet), the retrospective view of which is fine. The soundings for the most part indicate very deep water. As we approach the northern extremity of the sound, where Burke Channel opens out on the right, opposite Hunter Island, the scenery increases in grandeur, the lesser and nearer hills being clothed to their summits with coniferous trees, while the more distant elevations are covered with snow. From Fisher Channel the vessel turns sharply to the left and enters the narrow Lama Passage, which, farther on, itself makes an abrupt turn northward. On the shores of Campbell Island, at McLaughlin's Bay, is the Indian town of Bella-Bella, and near it are some curiously adorned graves of the natives. To this point the Indians come from Bella-Kula, eighty miles up Burke Channel, in the mountains, to trade. The northern entrance to Lama Passage, through which we emerge into the broad Seaforth Channel, with its multitude of picturesque islands, is extremely narrow. More fine scenery awaits us at this point, the grouping of mountains being grand in the extreme.

Another turn in our remarkably devious course, and we are steaming northward through Milbank Sound, through whose broad entrance we again look out to the open sea. Islands and mountains are innumerable, and there is a constant panorama of lovely scenery. A prominent object seen on the approach to Milbank Sound is Helmet Peak, on Lake Island; and another, farther north, is Stripe Mountain, on the north side of Dowager Island. The latter is 2,020 feet high, and is marked by a great landslip down its southwest face. Leaving Jorkins's Point, the southern extremity of the great Princess Royal Island, to our left, we continue our course almost directly northward through the long and narrow Finlayson Channel, some twenty-four miles long, with an average width of two miles. The bold shores of this picturesque water-way are densely wooded to a height of 1,500 feet or more, precipitous peaks rising in places to the height of nearly 3,000 feet, with still higher mountains showing behind with stripes and patches of snow. Waterfalls of great height here add a new element of beauty to the scenery. A contraction of the channel known for twenty miles as Graham Reach, and for the next ten miles as Fraser Reach, brings us to the northern end of Princess Royal Island, where we turn westward through McKay Reach into Wright Sound.

Grenville Channel, which we enter from Wright Sound, and which lies between Pitt Island and the mainland, is for fully fifty miles as straight as an arrow, and here are fresh scenes of wonderful beauty and sublimity — mountains several thousand feet in height, which no man has ever visited and as yet unnamed; cascades which seem to tumble from the sky itself, and densely wooded shores where solitude reigns supreme. Some of the distant hills seen through the openings are seamed by glaciers and avalanches. From an expansion of this channel we pass through a narrow strait known as Arthur Passage, which has Kennedy Island on the right, and the large Porcher Island on the left. There are many fine mountain peaks on both islands, one on Ken-

nedy Island gaining an elevation of 2,765 feet. Just above Kennedy Island the Skeena River enters from the east. We soon reach the broad waters of Chatham Sound through Malacca Passage, and for some distance course along the shores of the Tsimpsean Peninsula, passing both Old Metlakahtla, — the scene of Mr. William Duncan's early labors, successes, and struggles, — and Port Simpson, an important post of the Hudson Bay Company, established as early as 1831, on the right. The Tsimpsean Peninsula is thirty-two miles in length, and, but for a narrow neck of land between the Skeena and Work Channel, would be an island. It takes its name from the tribe of Indians inhabiting it, and who were until recent years the mortal enemies of the Haidas, who live on the Queen Charlotte Islands and in the Prince of Wales Archipelago, the former being on the British, and the latter on the American, side of the line. It was mainly from this tribe that Mr. Duncan gained his converts. In 1887 Mr. Duncan and about 600 of the Indians removed from Old Metlakahtla to Annette Island, in the Alexandrian Archipelago, on the American side, to save themselves from further annoyance at the hands of the Church of England; while Bishop Ridley continued in possession of the old settlement with about 120 natives, who chose to remain rather than leave their old home. The church at Old Metlakahtla, now a cathedral, built by the Indians themselves like everything else about the village under Mr. Duncan's direction, is, by the by, the largest place of worship in all British Columbia.

Continuing northward through Chatham Sound, there are many fine views of distant mountain ranges, one of which, lying back of Port Simpson, culminates in the massive Mount McNeill (4,300 feet).

Alaska.

Leaving the picturesque Portland Inlet on our right, into which enter the Nass River, Observatory Inlet, and the far-reaching Portland Canal, we soon cross, in

latitude 54 degrees, 40 minutes, the boundary line between British Columbia and Alaska.

Before proceeding farther on our journey, let us examine into the extent and physical condition of our northernmost and westernmost possession,—the land we have crossed a continent to see, for all we have yet viewed is only preparatory to Alaska.

That the area of Alaska is vast, is a well-known fact; but few persons who are not versed in statistics realize that it is nearly one sixth as large as the entire United States, and more than one seventh as large as the whole of Europe. It exceeds in domain three of the largest States of our Union,—Texas, California, and Montana,—or all that portion of the United States lying east of the Mississippi River and north of Georgia and the Carolinas. England, Ireland, Scotland, and Wales, together with Prussia, Spain, and Italy, might all be placed within its borders, with an area to spare that would measure within twenty-eight square miles of the territory of Switzerland; for Alaska covers no less than 580,107 square miles. The islands upon its coast have an area of 31,205 square miles, or nearly as much as the State of Maine. The Alexander Archipelago, lying north of the British Columbian boundary line and along Southern Alaska, of itself contains several thousand islands. The Aleutian Chain has an area of 6,391 square miles. The coast line of the Territory is 18,211 miles in extent, or equal to all the rest of our sea line on the Atlantic and Pacific put together. The island of Attu, the farthest of the Aleutian Chain, is as far west of San Francisco as Bangor is east of it, and in fact 2,090 miles west of Sitka. It is as far from the northern to the southern point of Alaska as from Maine to Florida, and as far from its eastern boundary to its westernmost as from Washington to California. Mount St. Elias was formerly claimed to be 19,500 feet high,—the most elevated peak on the North American continent,—but a recent survey reduces these figures by 5,000 feet.

Mount Wrangel, a volcano in eastern central Alaska, at the forks of the Copper River, in the Chugatch Alps, is thought to be higher than the elevation long accorded to Mount St. Elias, but no measurement has yet been made. Mount St. Elias belongs to the third highest range in the world. Its great river, the Yukon, computed to be not less than 3,000 miles long, is navigable for a distance of 2,000 miles, and is from one to five miles in width for 1,000 miles, while its five mouths and the intervening deltas have a breadth of seventy miles. The glaciers surrounding Mount St. Elias are estimated to be 20,000 square miles in extent.

One of the most popular errors extant about Alaska has reference to its climate. The winters of northern and interior Alaska are undoubtedly very severe; but the coast south of the Aleutian Islands,— the whole of Southern Alaska, in fact,— being under the influence of the Kurisiwo, or Black Current of Japan, possesses in reality a mild climate. A record of eight degrees below zero is the lowest that has been registered at Sitka in fifty years, and only four times during that entire period did the mercury descend below the zero point. Fort Wrangel, although farther south than Sitka, is warmer in summer and colder in winter, because it is farther removed from the great equalizer — the ocean current. The Queen Charlotte Islands, on the other hand, have a very mild climate.

The native population of Alaska, with the exception of a single tribe,— the Tinnehs, found in the interior,— estimated by the census reports of 1880 at something over 31,000 altogether, is *not of Indian origin.* Whether Mongolian, Aztec, or both, remains to be proven. Persons who have devoted attention to the subject have found much in the language, customs, and arts of the Haidas, the most remarkable of these tribes, to support the Aztec theory, while there is also much to suggest Japanese or Chinese origin. According to the census reports, there are five distinct tribes; viz.

the Innuit, or Esquimaux; the Aleuts, inhabiting the Aleutian Islands; the Tinnehs; the Thlinkets of Southern Alaska; and the Haidas. Those seen mostly by the tourists are Thlinkets, but at Wrangel there are likely to be some Haidas.

The United States paid Russia the sum of $7,200,000 for the country in 1868. The seal fisheries, the monopoly of which has recently been extended by the government for the second time, has returned a good rate of interest on this expenditure. The fisheries are valued at $3,000,000 a year, and the gold production is large and of growing importance. So far from being a barren, bleak, untenantable country, as the opponents of the purchase scheme so strongly contended, Alaska is likely to become one of the richest parts of our national domain.

Along the Alaskan Coast.

In entering Alaska from British Columbian waters, the voyager crosses Dixon Entrance, as the channel north of Dundas Islands, and between Prince of Wales and Queen Charlotte Islands, is called. One of the first points of land seen jutting into American waters is Cape Fox, so named by Vancouver. Near here, at Fort Tongas, the United States formerly maintained a military post, and later a custom house, but both have been given up. The situation of Fort Tongas renders rains very frequent, and the excessive rain-fall of 118 inches is said to have been recorded in a single year. From Dixon Entrance we course northward through Clarence Strait, which is over 100 miles long and nowhere less than four miles in width. We are now within that remarkable geographical area known as the Alexander Archipelago, a bewildering collection of mountain-studded islands, rocks, straits, inlets, and passages, as yet but partially explored. Throughout the whole of Clarence Strait we have the great Prince of Wales Island on the west. At Port Chester, on Annette Island, which is one of the Gravina group, Mr. Duncan has founded the new Metlakahtla, and is rapidly build-

ing up a substantial town, with a church, schools, and self-supporting industrial establishments. North of the Gravina group lies Revilla Gigedo Island, with its varied and picturesque shores; while upon the left Casaan Bay is an indentation of Prince of Wales Island. The several islands are mountainous, and the views at all points are exceedingly fine.

Fort Wrangel.

After passing Etoline, Zarembo, and some lesser islands, and emerging from Clarence Strait, we reach Fort Wrangel, an old Russian settlement that stands at the head of Wrangel Island, and at the mouth of the Stikine River, one of the waterways that lead to the Cassiar mining region in the interior of British Columbia. The place has lost its old importance, and is given over chiefly to the Stikine tribe, a branch of the Thlinket race, but is interesting to the stranger as possessing the best display of totem poles he is likely to see. The totem pole is a sort of ancestral emblem formerly held in high esteem, but fast disappearing. The natives are divided into families, or clans, of which the Raven, the Wolf, the Whale, and the Eagle are the chief representatives, and, as tradition relates, the progenitors. Thus the representation of these animals or birds, with their commingling in case of intermarriages, becomes a sort of family crest. United with the rude carvings of heads, various striking events in the career of the family are sometimes depicted. The poles are from twenty to sixty feet in height, and from two to five feet in diameter, the carving being in front, while the rear portion is hollowed out to make them light enough to erect. These carved emblems are placed in front of the house; and in some of the totem poles seen among the Haidas, where the oldest and best-executed specimens are found, a doorway was cut through the trunk of the totem for ingress and egress. It was also customary to ornament the top with a figure wearing a Tyhee hat, in case the house-

holder was a chief, and upon this would be cut a series of rings corresponding with the number of "pot-latches" (a feast with gifts) with which the inmate had honored his friends. The totem poles seen at Wrangel are interesting specimens, though not of the highest order of totem carving. The natives generally carve their household implements, and even their paddles and wooden-mounted fish-hooks, into hideous shapes. This is true especially of the Haidas, who are also expert workers in silver. Silver bracelets and bangles, carved horn spoons (now becoming rare), Chilkaht blankets, and black stone carvings (from Skidegate, on the Queen Charlotte Islands) are the curios mostly sought after by tourists throughout Alaska and at British Columbian ports. The spoons are made from the horn of the mountain goat.

Another quaint relic is the curiously carved rattles of the shamans or medicine-men. In addition to the totem poles in front of the habitations at Wrangel, there are some curiously marked graves, one being surmounted by a huge carving of a wolf. This has lately been removed from its former site to another part of the village, near the saw mill. Some of the dwellings at Wrangel have two totem poles, one representing the male side and the other the female side of the house. Indeed, "women's rights" prevail among the Alaskans to an extent that gives the mother the prominent place on the totem instead of the father. In one instance a pole is surmounted by the image of a bear; while no other carving is shown upon the column except the footprints of the animal, made apparently while he climbed to his present eminence.

The Alaskans have many strange customs, one of which is for the young women to besmear their faces with a hideous black paint, which is said to be put on to preserve their complexions. Another is the wearing of the *labrette*, a silver, ivory, bone, or wooden ornament that is thrust through the under lip. A Thlinket woman is not always an object of beauty under favoring circumstances, and certainly a blackened

face and a *labrette* do not serve to make her look anywise prettier. There are at Wrangel a flourishing school and mission.

Northward from Fort Wrangel.

Resuming our voyage, we turn westward from Fort Wrangel, and, entering Wrangel Narrows, steam northward and out through the mouth of Souchoi Channel into Prince Frederick's Sound. On emerging from the Narrows new visions of grandeur await our wondering gaze. A range of high mountains is seen upon the opposite shore, strongly marked in black and white patches of rock and snow. From one of the elevations rises a remarkable monolith called the Devil's Thumb. In one place a huge glacier, the blue ice succeeding the pure white of the snow fields, pours its frozen flood nearly down to the sea. This glacier has been named in honor of the late Carlisle Patterson, of the United States Coast Survey. As we sail nearer and beyond, we see that it comes transversely from the mountains, turning a corner to reach its lower slopes; while at one point a great mass seems to overhang from the mountain-side. Another great glacier succeeds this one, with great prongs running back among the peaks, and then a third. The distant mountain tops, when viewed under varying effects of shadow and sunshine, or under the flooding golden sheen of a sunset, present no end of entrancing pictures.

Leaving Prince Frederick's Sound, we sail northward through Stephen's Passage, which has for the greater part the mainland, on the right, and Admiralty Island, on the left, as its boundaries. Meanwhile we pass Holkham Bay, where, in 1876, the first placer mining in Alaska was begun, and Taku Inlet, a great fiord entering from the east, where there are glaciers running down to the water's edge, evidences of which are seen in floating masses of ice — miniature icebergs. Captain Carroll is accustomed to enter Taku Inlet, and to obtain a supply of ice for the ship at first hands.

Juneau and the Gold Mines on Douglas Island.

Leaving Taku Inlet to the right, we ascend Gastineaux Channel, a river-like body of water that separates the mainland from Douglas Island, and soon reach the mining town of Juneau, the most populous settlement in all Alaska. Here, on a narrow strip of land, at the foot of a deep ravine flanked by precipitous mountains, is a cluster of white houses. Half a mile away, and reached by a muddy foot path, is an Auk village. Beyond the village is a native burial-place. A few miles back of Juneau, up the narrow and picturesque ravine or gulch, lies the Silver Bow mining basin; and on the opposite side of the narrow channel, at the foot of the heights, are the buildings connected with the famous Treadwell gold mine. This settlement dates back only to Oct. 1, 1880, when Joseph Juneau and Richard Harris, two mining prospectors, camped upon its site. The place was named Harrisburg, after one of the prospectors, and the region was denominated the Juneau district, in honor of the other. Notwithstanding this mixed nomenclature, the naval officers made the muddle the deeper by naming the harbor in honor of Commander Rockwell, of the United States steamer "Jamestown." Finally, in 1882, the miners decided that the town should be called Juneau, and Juneau it remains.

There are numerous shops about the place, and the pursuit of curios is made a pastime by the tourists. Natives from the Chilkaht country frequently come as far south as here; and the celebrated Chilkaht dancing blankets, gradually becoming very rare, are likely to be seen, with furs, carvings, and silver ornaments. Two excellent weekly papers, the *Alaska Free Press* and the *Juneau Mining Record*, are published here, and there is also a flourishing mission school. The surroundings of Juneau are very picturesque. Both shores are densely wooded, and it is amazing to see how tenacious of life are the firs and cedars which find root on slopes but slightly removed

from the perpendicular. Here, as elsewhere, there is a rich and tangled mass of undergrowth. Cascades — some of which on Douglas Island are of large extent — pour down the mountain-sides, mingling their roaring floods with the waters of the sea.

We are likely to next visit the Treadwell mine, across on Douglas Island. Here a crushing mill of 240 stamps — the largest in the world — is in operation, and the output is said to reach $150,000 per month. The ore is of low grade,— from $4 to $9 per ton,— but it is practically inexhaustible, and is so economically worked that the profits are necessarily large. The mine itself is on the mountain-side, and has been worked largely as an open quarry. Operations were begun in real earnest at this mine in July, 1885, since which time there have been extensive improvements and enlargements. There are other valuable claims on Douglas Island and near Juneau. Ex-Governor Swineford, in one of his last reports, expresses the belief that this region will become one of the most prolific gold fields in the world. At the Treadwell mine the ore actually in sight is estimated to be worth five times the sum the United States paid for the entire territory.

Northward Again and up Lynn Canal.

As Gastineaux Channel has not been fully surveyed above Juneau, our steamer returns to Stephen's Passage before proceeding northward. We soon reach Lynn Canal, a remarkable fiord that extends sixty miles directly north into the mountains, there terminating in two forks, named respectively the Chilkaht and Chilkoot Inlets. The scenery surpasses in grandeur all that has been seen in more southern latitudes. High mountains line the shores, and no less than nineteen great glaciers pour their icy floods down their sides. Two of these, the Eagle Glacier and the Davidson Glacier — the latter on the west near the head of the channel — are especially notable. The Davidson Glacier was so named in honor of Professor George Davidson, the astronomer, who

explored its lower slopes in his visits to the Chilkaht country in 1867 and 1869. As we sail in front, the lower slopes of the glacier are screened by a growth of trees that has sprung up on its terminal moraine. Above the trees it is seen pouring down through a rocky gorge, below which it spreads out like a fan to the breadth of three miles. There is, in fact, a glacier in almost every ravine; and, as the supply of vegetation is greatly lessened, the really Arctic appearance of the landscape becomes very marked.

At Pyramid Harbor, which is near one of the Chilkaht villages from which miners depart for the Yukon country, is the northernmost point reached by the Alaska steamers; viz. latitude 59 degrees, 10 minutes, and 36 seconds. The summer days in these latitudes are notably long, there being only two or three hours of appreciable darkness.

The Great Muir Glacier, in Glacier Bay.

We now turn our attention to the crowning glory of this veritable wonderland — the great Muir Glacier, in Glacier Bay. This we reach by retracing our way southward through Lynn Canal to the point where its waters mingle with those of Cross Sound or Icy Strait, from whence we turn northwestward into Glacier Bay, an indentation which extends about thirty miles in that direction, with a breadth of from eight to twelve miles in its lower reach, and narrowing to about three miles at its upper end, where seven enormous glaciers descend to its waters. The peninsula enclosed by Glacier Bay, Cross Sound, and the Pacific Ocean is from thirty to forty miles wide, and contains numerous lofty mountains, including Mounts Crillon (15,900 feet), Fairweather (15,500 feet), Lituya (10,000 feet), D'Agelet (9,000 feet), and La Perouse (11,300 feet). These form the southern extremity of the Mount St. Elias Alps. All these noble summits are seen from the steamer's deck while ascending Glacier Bay, together with the picturesque White Mountains, which line the east,

between Glacier Bay and Lynn Canal; but Mount St. Elias itself is too far north to be visible. Vancouver found a wall of ice extending across the mouth of the bay in 1794, and it was not until 1880 that Glacier Bay occupied a place on any printed map. Near the mouth of the bay is a group of low islands named after Commander Beardslee, of the United States Navy, and composed of loose material, evidently glacial débris. Willoughby Island, near the middle of the bay, is a bare rock, about two miles long and 1,500 feet high, showing glacial furrows and polished surfaces from the bottom to the top. The Muir Glacier enters an inlet of the same name, near the head of the bay, in latitude 58 degrees 50 minutes north and longitude 136 degrees 40 minutes west of Greenwich. It was named for Professor John Muir, the Pacific Coast geologist, who in 1879 was, with Rev. S. Hall Young, of Fort Wrangel, the first to explore the glacier. It was not until 1883 that Captain Carroll began bringing tourists hither.

The glacier enters the sea with a gigantic front two or three hundred feet above the water, and a mile wide. Imagine a wall of blue ice, splintered into columns, spires, and huge crystal masses, with grottoes, crevices, and recesses, higher than Bunker Hill Monument and of such far-reaching extent! It is a spectacle that is strangely beautiful in its variety of form and depth of color, and at the same time awful in its grandeur and suggestion of power. And not alone is the sight awe-inspiring. The ice mountain is almost constantly breaking to pieces with sounds that resemble the discharge of heavy guns or the reverberations of thunder. At times an almost deafening report is heard, or a succession of them, like the belching of a whole park of artillery, when no outward effect is seen. It is the breaking apart of great masses of ice within the glacier. Then some huge berg topples over, with a roar and gigantic plash that is heard and felt for miles, the waters being thrown aloft in clouds of spray. A

great pinnacle of ice is seen bobbing about in a wicked fashion, perchance turning a somersault in the flood before it settles down to battle for life with the sun and the elements on its seaward cruise. The waves created by all this terrible commotion even rock the huge steamer, and wash the shores miles away. There is scarcely an interval of ten minutes in the day or night without some exhibition of this kind. There are mountains each side of the glacier, the ones upon the right or east shore being more elevated. High up on the bare walls are seen the scoriated and polished surfaces produced by glacial action, indicating that once the ice stream was thousands of feet thick. The present glacier is retrograding quite rapidly, as may be seen by many evidences of its former extent, as well as by the concurrent testimony of earlier visitors. On either side is a moraine half a mile wide, furrowed and slashed by old glacial streams, which have given place to others higher up the defile as the glacier recedes. On the west side the stumps of an ancient forest, supposed to be pre-glacial, have been uncovered. Notwithstanding the contiguity of the ice and the generally frigid surroundings, blue bells and other flowers are found blooming. In the centre of the ice stream, about two miles from its snout, is an island of rock, the summit of some peak the great glacier mill has not yet ground down.

Professor George Frederick Wright, who has a world-wide fame on account of his investigations of ancient glacial action, devoted a month's study to the Muir Glacier in 1886, and made some interesting experiments to determine its rapidity of motion. The main body of the glacier, says Professor Wright, occupies a vast amphitheatre, with diameters ranging from thirty to forty miles. Nine main streams of ice unite to form the grand trunk of the glacier. These branches come from every direction north of the east and west line across the mouth of the glacier; and no less than seventeen sub-branches can be seen coming in to join the main streams from the mountains near

the rim of the amphitheatre, making twenty-six in all. The width of the ice where the glacier breaks through between the mountains is 10,664 feet; but the water front, as previously remarked, is only a mile wide. The central part of the mass moves more rapidly than the sides, and formerly extended about a quarter of a mile beyond the corners. It should be said that the front frequently changes its aspect, in consequence of the breaking away of huge masses. Last summer the sides projected beyond the centre section. The depth of the water 300 yards south of the ice front, according to Captain Hunter, is 516 feet near the middle of the channel. Last year a still greater depth was noted by Captain Carroll a short distance in front of the glacier. Professor Wright's measurements showed the front to be 250 feet high at the extremity of the projecting angle. Gleaming masses of crystal, veritable icebergs, wrenched from the descending glacier, float about the bay, driven hither and thither by wind and tide. As from five eighths to seven eighths of the bulk of an iceberg are supposed to be beneath the surface, some of these bergs must be of huge proportions. The measurements made by Professor Wright and his companions to determine the rate of motion developed some interesting facts. In this connection it should be remembered that the calculations made as to the rapidity of glacial movement by De Saussure, Agassiz, Tyndall, and others have hitherto been based upon measurements of the Swiss glaciers, which are small and shallow, when compared with the enormous ice streams of Alaska, Greenland, and the polar seas. Observations made upon different sections of the Muir Glacier led Professor Wright to these conclusions: That a stream of ice, presenting a cross-section of about 5,000,000 square feet (5,000 feet wide by about 1,000 feet deep), is entering the inlet at an average rate of forty feet per day (seventy feet in the centre, and ten feet near the margin of movement), making about 200,000,000 cubic feet per day during the month of August.

The steamer generally approaches the glacier front to within a safe distance, near enough, however, for a close examination of its formidable wall, and there is also time for a landing and a limited exploration of its surface and surroundings.

Sitka.

Leaving Glacier Bay with reluctance, we shall steam away for Sitka, the capital of Alaska. There are two routes thither — one through Cross Sound, or Icy Strait, and the other through Peril Strait, or Pogibshi Channel. Peril Strait lies between Chichagoff and Baranoff Islands. Sitka is on the western shore of the latter, inside Kruzoff Island. It is very picturesquely situated, with a noble background of mountains. while the bay is dotted with scores of beautiful green islands. Across the bay on Kruzoff Island is the extinct volcano, Mount Edgecumbe, 2,800 feet in elevation. Mount Verstovaia rises sentinel over the town, to a height of 3,212 feet. Mount Edgecumbe (and also Mount Fairweather) received its name from the intrepid navigator, Captain James Cook, who visited these shores in May, 1778, in the course of his third and last voyage to the Pacific Ocean. Sitka was founded in 1804 by Baron Baranoff, the first Russian governor of Russian America, four years after his original settlement at Starri Gavan Bay — a few miles north of the present site — had been destroyed by the natives, in the first year of its existence. There are many reminders of Russian occupation, the chief of which are the old Baranoff Castle — a plain-looking block edifice, which stands on Katalan's Rock, near the water — and the Greek Church. The castle is the third edifice erected on the same site by the Russians, the first having been burned, and the second destroyed by an earthquake. Several other large structures, built during Russian occupancy, remain and serve for baracks, court rooms,

etc. The principal street of the town, and almost its only one, extends from the wharf to the Greek Church, and then, bending around the corner of that notable edifice, winds along the beach to the Presbyterian Mission.

If the visitor continues his walk in that direction, he will discover a romantic path through the woods by Indian River. A little square at the left of the main street, near the water,— beyond which is the modest residence of the governor of the territory,— was once a Russian shipyard. Stretching along the shore to the left is the native town or *rancherie*, where 800 or 1,000 Sitkans live in the peculiar kind of frame houses common to other parts of Southern Alaska. Nothing in the form of totem poles is seen here, although the Sitkans, once a powerful, insolent, and really dangerous tribe, have many customs common to other Alaskan peoples. A small part of the old stockade which kept the natives without the Russian town after prescribed hours still remains, although most of the barricade was destroyed after the withdrawal of the American troops in 1877. On the slopes back of the native *rancherie* are the burial-grounds of the Russians and the Sitkans, and the remains of an old block house that commanded an angle of the stockade. Katalan's Rock bears the name of an ancient chief who had his habitation there. The Greek Church, with its green roof and bulging spire, is the most picturesque edifice in the town, and is one of the chief centres of attraction. It contains some quaint pictures on ivory, with settings of silver and other metal. Although few Russians are left in Alaska, the Russian government expends about $50,000 a year in maintaining this church and others at Kodiak and Ounalaska. In the belfry is a chime of six sweet-toned bells brought from Moscow. The old Russian mill still stands beyond the church; but the tea garden, clubhouse, and race course are decayed and practically forgotten. The Presbyterian Mission, established in 1877 by Rev. Sheldon Jackson, D. D., and Mrs. A. R. McFarland, and now under the

charge of Rev. Alonzo E. Austin, is the largest in Alaska. Near the mission is the interesting Museum of the Society of Alaskan Natural History and Ethnology.

The Return Trip.

Sitka is accounted the end of the northward voyage, although situated many miles south of Glacier Bay and Pyramid Harbor. We have yet nearly 1,000 miles of water passage to accomplish before reaching Victoria, Port Townsend, and the other Puget Sound points. Our track will be in the main over the same magnificent course we have come, with the omission of the more northward portion. There will perhaps be landings at several points, including Juneau and Fort Wrangel, although this is not certain, and the trip will possess fresh interest from the fact that much of the scenery missed in the night during the north-bound passage will now be visible. Even with the same grand scenes to gaze upon and nothing else, the experience would be enchanting; for the grand panorama along the Alaskan and British Columbian coast is matchless in its beauty, variety, and true grandeur. The return will occupy five or six days, but the exact times of arrival or departure cannot be predicted with any degree of exactitude in a voyage of such extent. It is expected that the Puget Sound ports will be reached not later than Monday, August 3, by the first party, and Tuesday, August 18, by the second party.

Port Townsend.

The steamer will touch at Victoria, and then continue on to the American ports on Puget Sound, the first of which is Port Townsend, situated at the head of the Strait of Juan de Fuca, and until recently the only port of entry for the whole Puget Sound district. More American tonnage is registered in Port Townsend than in any other port except New York. The government has already expended $100,000 for a Custom

House, and the sum of $120,000 has been appropriated to make needed additions. It is proposed to erect fortifications near the lighthouse at a cost of $500,000. A County Court House and other public buildings have been erected, and, like its neighbors on the sound, Port Townsend has taken a grand leap forward. The Port Townsend Southern Railway is being constructed to connect the city with the outside world, all communication at present being by water; and the road already reaches far into the Olympic range of mountains, over a road of great picturesqueness.

Seattle.

From Port Townsend we proceed to Seattle, the remarkable city that has been built up on the east shores of the sound — twice built up, in fact, nearly the entire business section of the place having been destroyed by fire in June, 1889. The new Seattle is more substantial and handsomer than the old, and in many ways a gratifying indication of the pluck, energy, and business enterprise of her citizens. With a population of 43,914, according to the late census, against 4,533 in 1880, the city is already one of the leading Pacific Coast points, and its many interests are constantly increasing in importance. Nearly $7,000,000 were expended in 1889 in the erection of new buildings; while in street railways, street grading, and other public improvements, a further sum was added, making an aggregate expenditure of $13,547,979 in a single year. In the city and suburbs, no less than 3,465 buildings were constructed. Some of the schools, churches, and several of the public buildings — notably the County Court House — are imposing edifices. Numerous railway lines enter here, and there are also steamer connections with near and distant points. The Northern Pacific Railroad Company has a line running to Tacoma, and there are also several lines of steamboats between the two cities. Seattle is charmingly

situated between the waters of the sound and Lake Washington, a body of fresh water thirty miles in length.

It may be deemed advisable to divide the parties for the visits to Seattle and Tacoma. Both cities will be included, one section seeing Seattle first and the other Tacoma.

Tacoma.

At the head of Puget Sound lies another beautiful city — Tacoma — which had scarcely an existence a dozen years ago. In 1880 the number of inhabitants was 1,098. In 1890 it was 35,858. This place derived much of its early importance from being the terminus of the Northern Pacific Railroad, which line, however, is now connected with all other important points on the Northwest Pacific Coast. Its manufacturing interests are large and constantly increasing. The city occupies a high bluff, overlooking the sound and the Puyallup valley, at the head of which stands the giant snow peak of Mount Tacoma (14,444 feet elevation). Many of the new buildings, including the Opera House block, are really magnificent, and there are also a great number of handsome residences. The Northern Pacific Railroad Company has a handsome building on Pacific avenue, in which its western offices are situated. The buildings erected in a single year (1889) cost $5,901,195. New and costly hotels are being erected both in Tacoma and Seattle. During our visit to Tacoma the party will make its headquarters at The Tacoma.

Southward from Puget Sound.

On leaving Seattle and Tacoma, we shall journey over the Northern Pacific Railroad southward to Portland, Or. The cars are ferried across the Columbia River, between Kalama and Hunter's, on a large ferry-boat.

From Portland to Dalles City.

We shall reach East Portland in the morning, but defer our inspection of the city until our return from our trip on the Columbia River. Our Pullman train will be transferred to the tracks of the Union Pacific Company's Oregon line, and we shall continue our journey eastward a distance of eighty-eight miles to Dalles City, where we shall remain upon the cars over night. The views of the Columbia River and its noble boundaries had from the cars are not less interesting than those from a steamer's deck. The road runs almost beneath the spray of Multnomah Falls, which in two great plunges descends 800 feet. The falls are situated in a romantic gorge only a short distance from the railway, and there are a number of grand points of observation readily accessible. The train passes near numerous remarkable rock formations, and directly between the "Pillars of Hercules." There are several fine falls near the road in addition to beautiful Multnomah, but they are better seen from the steamer's deck than from the cars. The railway ride will occupy the greater part of the afternoon.

Dalles City.

Just below the Great Dalles of the Columbia, where the whole volume of the river, at its ordinary height, runs for about one and one-half miles through a narrow gorge in the basalt, averaging not over 100 yards in width and in the narrowest part only sixty feet wide, the hills open out, giving position to a charming place called Dalles City, one of the oldest-settled points east of the Cascades. The streets are laid out regularly along and up the slopes, and are for the most part lined with shade trees. Several of the churches and school edifices are very handsome and attractive. As we are to reach Dalles City at an early hour, there will probably be time to climb the heights in rear of the town, from whence a magnificent view is obtained.

The Columbia River.

The ensuing morning we leave the cars and go on board the steamer for a return trip down the noble Columbia River. The first stage of our voyage is as far as the Upper Cascades. The scenery in this part of the river — the Middle Columbia, as it is generally termed — differs somewhat from that below the cascades, but is at all times very picturesque. The banks are chiefly mountainous or precipitous cliffs, save at the entrance of Hood River, on the south, and White Salmon River, on the north, which open up something like valleys. With the exception of these two limited districts, there is little farming land for seventy-five miles along the river. Hood River is fed by the snows on the mountain of the same name. Some magnificent views of this grand mountain form are had on the way down the river. An occasional glimpse is caught of Mount Adams, but this mountain is generally hidden by nearer hills. The shores are for the most part densely wooded with maple, alder, ash, and willow; while the mountains are clothed with pines and firs. Here and there are huge cones and walls of bare rock. In one place a great mountain of solid rock rears itself 1,000 feet or more above the river, like the gable end of some giant's habitation.

A Portage Around the Cascades.

Forty-five miles below Dalles City and a short distance from Bonneville, the passengers are forced to land and make a transfer around the cascades of the Columbia. This is done by means of a narrow-gauge railway, six miles in length, which runs along the northern shore to the Lower Cascades. The river here is unnavigable, the water pouring over its rocky bed in a tumultuous torrent. The government is building a canal, with locks, around the obstruction, but the work is beset by many difficulties and enormous expense. We are here in the very heart of the mountain range which has

derived its name from these cascades, and which is continued hundreds of miles southward through California as the Sierra Nevada. Near the Upper Cascades, on the Washington side of the river, on a point of land that juts out so as to make a good defensive position, is the old block-house, built nearly forty years ago as a means of protection against the Indians. In the outbreak of 1855 the block-house became the refuge of the settlers, and it was successfully defended under direction of young Lieutenant — afterwards the famous Lieutenant-General — Philip Henry Sheridan.

Near this same point the Indian village of Wish-ram, referred to in Washington Irving's *Astoria*, and also by Lewis and Clark, existed early in the present century.

Again upon the Columbia.

Embarking upon another steamer below the cascades, we continue our down-river trip on this noble stream. We are still in the heart of the Cascade range, and the scenery is wonderfully picturesque. We are near Castle Rock, a massive mountain which stands boldly forth on the north shore 1,000 feet high. A little way below, on the same side of the river, is Cape Horn, a bold headland of basaltic rock which forms just above it a picturesque little bay. On the opposite cliffs, marking the Oregon shore, are several falls, which almost rival in loftiness those in the Yosemite valley. Multnomah we have already seen on shore. The view from the steamer's deck is even more enchanting than the nearer one, since it includes much more of the surroundings. The Bridal Veil, the Latourelle, and the Oneonta are three beautiful falls, the latter being nearly as high as Multnomah. At other points flashes of foam, high amid the trees of the mountain-side, mark the presence of unnamed and unvisited cascades. Other strange objects of interest are the tall pillars of rock which rise

from the water or from the narrow shelf of shore along which the railway trains are seen creeping. Rooster Rock and the Pillars of Hercules are the most prominent of these. In places the cliffs crowded the river so closely that the men who did the blasting for the railway were let down from above by slings. We gradually get beyond the mountains, and then new pictures of beauty are formed by the tall, symmetrical snow pinnacle of Mount Hood, which rises now behind us. Washougal, La Camas, and Vancouver are towns upon the Washington shore, the latter being only six miles above the mouth of the Willamette, and an important military post. It occupies the site of old Fort Vancouver. The Union Pacific Railway Company is building a bridge across the Columbia at this point. Three miles up the Willamette there is a magnificent mountain view, five of the snow-capped peaks being visible at once. With the exception of Mount Tacoma, these mountains are exceeded in loftiness by many hundred elevations in the Rocky Mountain chain; but here the beholder is nearly at the sea level, while no other high mountains are near, so that the glittering silver crowns seem supreme, towering far above every other object.

Portland, Or.

We shall reach Portland about 5.00 P. M., and there will be an omnibus transfer from the wharf to the new and magnificent hotel, The Portland. This establishment was erected by a company of citizens at a cost of about $750,000, and is one of the finest hotels on the Pacific Coast. It occupies a whole square in one of the pleasantest and healthiest sections of the city, and has been furnished in a lavish manner. Its manager is Mr. Charles E. Leland, a member of a famous hotel-keeping family, and personally popular through his connection with well-known Eastern hotels. Portland has progressed rapidly within the past few years. Populous suburbs are growing up

on the east or opposite side of the Willamette, in connection with the railroad shops, flouring mills, and other manufacturing establishments. Portland has sixty miles of paved streets and twenty miles of street railway. Although Astoria was settled as early as 1811, the first white man is supposed to have landed upon the present site of Portland in 1843. Missionaries had established themselves in Eastern Oregon nine years before, and only five years later the much respected Dr. Marcus Whitman and his companions were massacred. The founders of Portland were two New England men; and, in bestowing a name upon the place, it is said to have been actually a toss-up whether the chief city of Maine or the city at the head of Massachusetts Bay should bear the honor of the designation. The business thoroughfares are lined with fine edifices, and some of the residences on the upper streets are very tasteful, as well as elegant and costly. The city contains sixty-three churches, including six of the Roman Catholic denomination. The Chinese, who form a large element in the population, are seen everywhere. "Chinatown" is not a contracted quarter, as in San Francisco and Victoria, but is scattered along the best portion of Second street for a dozen squares or more. Many of the churches and school buildings are imposing, and the same may be said of the Post Office and some of the other public edifices. Among the buildings under construction are a commodious union railway station, a fine edifice on Stark street, between Third and Fourth streets, for the occupancy of the Chamber of Commerce, a City Hall of handsome proportions, a Public Library, and a stately structure for the occupancy of the *Portland Oregonian*, the leading newspaper of the Northwest. The recent census gave Portland a population of 47,294, while its dependent suburbs — East Portland and Albina — were credited with 10,481 and 5,104 respectively.

From the slopes back of the city the views are magnificent. Mount Hood is here

the dominant feature in the landscape, lifting its proud head above the far-stretching forests; while the beautifully rounded snow-clad top of Mount St. Helen's, and some of the other mountains already mentioned, are also in sight.

There will be a carriage ride through the finest business and residence portions of the city, and to the heights above.

Over the Great Transcontinental Line of the Northern Pacific Railroad.

At the completion of our visit to Portland, Monday, August 10, and Monday, August 24, we shall begin our return transcontinental journey over the Northern Pacific Railroad — one of the great commercial arteries that have carried the active life-blood of the nation into the teeming Pacific Northwest. The morning will find us back at Tacoma, and then will begin a delightful day's journey across the new State of Washington. This railway line, like the one we journeyed over in our westward travels, was constructed at great expense and in the face of almost unsurmountable difficulties. Three proud stars have been added to our nation's banner, largely as the result of its opening and the consequent development of the great Northwest — Washington, Montana, and North Dakota, while the recent great territory of Dakota proved big enough to make a fourth. One of the greatest obstacles met with was in crossing the Cascade Mountains. For a time Puget Sound could only be reached by the way of Portland, and the construction of the Cascade Division was not fully completed until a few years since. Leaving Tacoma, the traveler first ascends the Puyallup valley, a part of the great hop-growing section of the Pacific Coast, where, in the hop-picking season, the strange sight is presented of 2,000 or more Indians laboring in the fields, some of the copper-skinned workers coming many hundred miles to gain employment; from as far north, indeed, as the Queen Charlotte Islands and the Stikine. The great snow dome

of Mount Tacoma is seen ahead of us, and in varying aspects as we speed along, now west of this monarch of the hills and then north. Many magnificent views are had of this massive mountain and of the nearer hills. At South Prairie and beyond, we are in proximity to the great coal fields of the State. The ascent of the Green River discloses some charming cañon scenery. This is a clear mountain stream which takes its rise in the Cascade range. At an elevation of 2,809 feet we pass through the Stampede Tunnel, which has an extent of 9,850 feet and is the longest tunnel in America, with the exception of the Hoosac Tunnel, in Massachusetts.

Eastern Washington

We descend on the east side of the Cascade range into the broad valley of the Yakima, which is followed for 165 miles, to its confluence with the Columbia. Ellensburg, the county seat of Kittitas, is the first town of importance reached after crossing the mountains, although several new places are springing into existence in the vicinity of the coal mines farther west. Ellensburg is one of the growing cities of the young State, and, notwithstanding its devastation by fire in 1889, is a populous and handsome place. North Yakima, thirty-six miles farther east, is another stirring town. It is situated near the Yakima Indian reservation.

Crossing the Columbia River near Pasco, we traverse two growing counties of Washington — Whitman and Spokane. In the latter, more especially, several important towns have come into being along the road, including Sprague, Cheney, and Spokane Falls, the latter being the only one of the three that had any existence before the railway was built. Cheney contains a handsome academy, the gift of Benjamin P. Cheney, of Boston, in whose honor the town was named. Spokane Falls is a large and flourishing city, which, like Seattle and Ellensburg, has suffered a baptism of fire.

The place has been rebuilt in a more substantial way than ever, and has already taken its stand among the most enterprising and important cities of the far West. Of its 20,000 population, three quarters have been acquired in three years, and 19,000 in five years. There are some picturesque falls within the corporate limits.

Idaho.

Nineteen miles east of Spokane Falls the boundary line between Washington and the newest State of the American confederation — Idaho — is crossed. The Northern Pacific Railroad traverses a very narrow strip of the northern part of the last-named State, the distance from the western border to the eastern being about seventy-eight miles only. Rounding the upper extremity of Lake Pend d'Oreille, the road ascends Clark's Fork, a turbulent stream which flows down through a succession of wild gorges, to the Bitter Root Mountains. At Hope, which is on the shores of the lake, railway time advances an hour — from Pacific to Mountain standard. The new State of Idaho has 84,229 inhabitants according to the recent census.

Montana.

Near Clark's Fork station we pass out of Idaho and into the new State of Montana, which, with its 143,776 square miles, is very nearly as large as the great States of New York, Pennsylvania, and Illinois combined. It has more than 1,000,000 acres in excess of the whole of New England. There are in Montana nearly 40,000,000 acres of grazing lands and 16,000,000 acres which are suitable for farming, in addition to its vast wealth in mines. The railway traveler is likely to declare that the region is practically treeless, and yet the State contains no less than 14,000,000 acres of forests, or more than are comprised in the State of Michigan. Montana was organized as a Territory

in 1864, a year after Idaho; and until 1880 there was not a mile of railway within its borders. It was admitted to statehood in 1889, and in 1890 was credited with a population of 131,769. Entering Montana in the extreme northwestern corner, we reach Heron, a town of several hundred inhabitants in the midst of a forest.

The Bitter Root Mountains were pierced on entering Montana, where Clark's Fork makes its way through. One hundred and thirty-five miles east of Heron and fourteen miles west of Missoula, the Coriacan Defile is reached, and the track crosses Marent Gulch by means of a trestle bridge 866 feet long and 226 feet high. A little farther on are other trestle bridges, one of which is 112 feet high. Missoula, the county seat of Missoula county, is beautifully situated at the western gateway of the Rocky Mountains, on the north side of Missoula River, near its junction with the Bitter Root and the Hell Gate. The road follows up Hell Gate River, passing through Hell Gate Cañon. We are in the midst of a placer-mining region; and the river, ordinarily clear, is in summer stained by the deposits of dirt from the tributary streams, along which many mining-camps are located. Some of the mines are very rich; and a large amount of the gold production of Montana, amounting to nearly $9,000,000 annually, has come therefrom. Near Gold Creek, a little distance west of Garrison, the "last spike" was driven Sept. 8, 1883, uniting the two ends of the Northern Pacific Railroad. There is some grand mountain scenery in this vicinity, the snow-covered peaks of Mount Powell being prominent south of the railroad.

Crossing the Rocky Mountains at the Mullan Tunnel, which has an elevation of 5,548 feet above the sea, we descend the eastern slopes of the great continental divide, and approach Helena. This city, with a population of about 15,000, is situated at the eastern base of the Rocky Mountains and on both sides of the famous Last Chance

Gulch, which yielded over $10,000,000 worth of nuggets and gold dust. Helena contains many handsome buildings, and is the commercial and financial centre of the new State, as well as its capital. It is surrounded by mountains, one of the most remarkable of which, "The Bear's Tooth," rises abruptly from the Missouri River, thirty miles north. Continuing eastward from Helena, the road passes through a mining region, and forty-two miles from that city crosses the Missouri River. It follows up that stream, amid much wild scenery, to Gallatin City, where the three rivers forming the Missouri, viz. the Gallatin, Madison, and Jefferson, unite. We keep on through the Gallatin valley, and 120 miles from Helena reach Bozeman, another flourishing and bustling town. Ascending through Rock Cañon, we cross the Belt range of mountains at an elevation of 5,572 feet above the sea level. Near the summit the hills are pierced by a tunnel 3,500 feet in length. Livingston, the diverging point for Yellowstone Park travelers and a large and growing town, will be reached Wednesday night.

The Yellowstone National Park.

From Livingston a branch of the Northern Pacific Railroad extends up the Yellowstone valley to Cinnabar, a distance of fifty-one miles, and there is a stage ride of only eight miles from thence to the Mammoth Hot Springs. The scenery along this part of the line is bold and striking. The road passes through the lower and middle cañons, both of which would be considered grand sights, except in comparison with the far grander scenes within the park. We are already amid the mountains; and at the upper end of Paradise valley the massive form of Emigrant Peak, 11,034 feet in height, becomes a prominent landmark. The chief objects of interest above this point are the Sphinx and the " Devil's Slide." The latter consists of two enormous dikes of trap-rock on the steep slopes of Cinnabar Mountain.

The reservation known as the Yellowstone National Park, set apart for public uses by an act of Congress passed in 1872, covers a tract of about sixty-five miles in length, from north to south, and about fifty-five miles in width, from east to west, lying chiefly in Northwestern Wyoming, and over-lapping, to a small extent, the boundary of Montana, on the north, and of Idaho, on the west. This gives an area of 3,312 square miles, a tract that is nearly as large as the States of Rhode Island and Delaware combined, and nearly half as large as the State of Massachusetts. The name "park" is perhaps misleading, as it is exceedingly diversified, containing numerous parks, or open tracts, as the name "park" has been bestowed in the mountain sections of Colorado, besides high mountains and beautiful lakes. The Rocky Mountain chain crosses the southwestern portion in an irregular line, leaving by far the greater expanse on the eastern side. The lowest elevation of any of the narrow valleys is 6,000 feet, and some of them are from 1,000 to 2,000 feet higher. The mountain ranges which hem in these valleys are from 10,000 to upwards of 11,000 feet in height, Electric Peak (in the northwest corner of the park, not far back of Mammoth Hot Springs) having an elevation of 11,300 feet. The drainage of the park area is divided among three distinct systems — the Yellowstone River, which has about three fifths and runs in a sinuous course from the southeast to the northwest corner of the park, mainly through deep cañons, and the Madison and Snake Rivers, which have about one fifth each. In 1871 Dr. F. V. Hayden made his preliminary survey, the report of which prompted Congress to set aside the tract as a public park. Since that time Dr. Hayden and his assistants have made further surveys of the region, and his twelfth annual report for 1878 (issued in 1883) gives the fullest information about the park yet published. For several years past Professor Arnold Hague, with a corps of scientific assistants, has been making a series of careful surveys of the region. "The number of geysers, hot

springs, mud pots, and paint pots," said Professor Hague in 1887, "exceed 3,500; and, if to these be added the *fumaroles* and *solfataras*, the number of active vents would probably be doubled." The same authority enumerates seventy-five active geysers in the four principal basins.

The surveillance of the park is in the hands of the military, and the present superintendent is Captain F. A. Boutelle, of the First Cavalry. The regulations against the marring or removal of geyser or hot spring deposits are necessarily strict, and are impartially enforced.

Mammoth Hot Springs.

We shall first visit Mammoth Hot Springs, arriving there early Thursday afternoon, and remaining until the ensuing day.

The springs have built up a series of remarkable terraces on the west side of a little plateau, or basin, 1,000 feet above the Gardiner River, into which their waters flow. On the opposite side of the river rises the long, rugged mass of Mount Evarts, which has an elevation of 7,600 feet, 1,213 feet higher than the hotel. The whole plateau and the steep slopes extending down to the river are mainly composed of calcareous deposits, resulting from springs and geysers now extinct. There are no active geysers at the present time in this basin; but two large cones of extinct geysers stand at no great distance from the hotel, and are almost the first objects to attract attention. These are "Liberty Cap," an isolated shaft forty-five feet in height and twenty feet in diameter at its base, and the "Giant's Thumb," or "Liberty Cap No. 2," about 100 yards distant and smaller. Both show signs of considerable age, and are gradually crumbling away. All around are a number of shallow basins; and in other parts of the plateau are cavities and caverns, from which hot springs probably flowed at some period more or less remote. The beautiful terraces, now in process of formation just

below the active springs, are the most interesting objects to be seen, however. The recent deposits, on which the springs are at present found, occupy about 170 acres. Dr. A. C. Peale (in Part II. of Hayden's *Twelfth Annual Report*) enumerates fifty-two different springs in this district, which have a temperature varying from 63 to 165 degrees Fahrenheit. The terraces are a succession of beautiful basins, over the rims of which the water falls in gentle rivulets and miniature cascades. The deposits, which result from evaporation, at the margins of each basin, are exquisite in form and color. The rims and walls present the most delicate arabesques, and fretted stalactites depend from the edges. Rich cream and salmon tints predominate, but these deepen into shades of red, brown, green, and yellow; while the turquoise blue of the waters affords a striking contrast of color.

On the Road to the Geysers.

Leaving the hotel at Mammoth Hot Springs, the party will proceed to the Lower and Upper Geyser Basins *via* the Norris Geyser Basin. This journey and the subsequent trips about the park will be made in comfortable wagons. The early part of the ride lies over a road which ascends the banks of Glen Creek to the Golden Gate and Rustic Falls, near which is Kingman's Pass, 7,300 feet above the sea. On the plateau above, from which a grand view is had of Electric Peak, Quadrant Mountain, Bell's Peak, and Mount Holmes, Swan Lake is situated. Near Beaver Lake are the famous Obsidian Cliffs, a ridge of volcanic glass from 150 to 250 feet high and 1,000 feet in length.

The Norris, or Gibbon Geyser Basin.

This is the first of the geyser basins encountered in our round of the park, and likewise the highest, its elevation above the sea being 7,527 feet. There are numerous

springs of water and mud and a few veritable geysers, the chief of these being the "New Crater" and the "Monarch." The former broke out with great force last spring. Dr. Peale enumerates ninety-seven springs of various kinds within this basin. The peculiarities here noticed are the absence of any very great accumulation of deposits, the newness of some of the important geysers, and the abundance of iron and sulphur. The "Monarch" is a powerful geyser which is in eruption once in about every twenty-four hours. It emits a stream to the height of about 100 feet. The "Hurricane" is a fierce, roaring spring that is expected to develop into a geyser, and the "Growler" is the significant name of another vigorous steam and water vent. The "Minute Man" is a small geyser near the road.

Gibbon Falls.

The road from the Norris Basin southward crosses a ridge, and, descending therefrom to the Gibbon Meadows, or Elk Park, soon enters the wild cañon of the Gibbon River. A new road has been constructed, forming a continuation of the old route along the river bank. This follows the river to a point below the picturesque Gibbon Falls, and is eventually to be extended to the Firehole Basin (or Lower Geyser Basin), thus avoiding a series of difficult hills. The falls, which are eighty feet in height, are seen to great advantage from the new roadway, which at this point occupies a high perch directly in front of the cataract.

The Lower Geyser Basin.

The hotel in the Lower Geyser Basin (or at the Forks of the Firehole, as the region is also designated) will be reached at a seasonable afternoon hour. This basin is a wide valley, with an area of between thirty and forty square miles, having an elevation

of 7,150 feet, or only 90 feet less than the Upper Geyser Basin, from six to ten miles distant. Above this, the surrounding plateau rises from 400 to 800 feet, the slopes being heavily timbered. In this section Dr. Hayden's party found 693 springs, including the Egeria Springs of the Midway Basin, among which the "Excelsior" Geyser and "Prismatic" Lake are counted. The chief points of interest visited by tourists are the "Fountain" Geyser and "Mammoth Paint Pots," which are situated near each other. The "Fountain" is a very handsome geyser, and is in eruption four times daily. The "Paint Pots" constitute one of the chief wonders of the park. In a crater forty feet or more in diameter, there are numerous mud springs, in which the material cast forth has the appearance of paint of different shades. The pasty material is exceedingly fine to the touch, and, as it bubbles up, generally assumes for a moment some floral form. A mile or so distant easterly, but difficult of access, is another group of geysers and springs, including the "Great Fountain," one of the most powerful geysers in the park. It is in eruption every forty-six hours, and throws water to the height of from 125 to 150 feet.

The "Excelsior" Geyser and "Prismatic" Lake.

In the ride between the Lower and Upper Basins, a halt will be made in the Midway Geyser Basin for the purpose of inspecting the great "Excelsior" Geyser, "Turquoise" Spring, and "Prismatic" Lake, all of which lie on the west bank of the river. The "Excelsior," the largest geyser known in the world, was in a state of great activity during 1888, after a period of inaction lasting about six years. The eruptions occurred at intervals of about an hour, and were very powerful. A great dome of water, often accompanied by lavatic stones, was thrown into the air to a height of between 200 and 300 feet, while the accompanying column of steam rose 1,000 feet or more. Early in

1889 the geyser again ceased action, but in 1890 it resumed its work, but with diminished force. Nevertheless, its eruptions, which occurred every two hours, were grand spectacles. The crater is an immense pit 330 feet in length and 200 feet in width at the widest part, the cliff-like and treacherous walls being from fifteen to twenty feet high from the boiling waters to the surrounding level. The name of "Cliff Cauldron" was given it by the Hayden Survey in 1871, and it was not until some years later that it was discovered to be a powerful geyser. "Hell's Half Acre" is another expressive title given to this terrible pit. Two rivulets pour forth from the cauldron and from the neighboring springs, and the deposits along their channels are very brilliantly colored.

The "Turquoise" Spring, near the "Excelsior," is beautiful in its rich tints of blue, and "Prismatic" Lake, also near at hand, is another wonderful display of color.

The Upper Geyser Basin and Its Wonders.

About five miles above the "Excelsior" Geyser we come to the Upper Geyser Basin. Here, in a nearly level tract inclosed by low hills, with the Firehole River flowing through it and mainly upon the east side, are found the chief geysers of this marvelous region. The basin has an area of about four square miles, and a general elevation of 7,240 feet. Dr. A. C. Peale (in Hayden's *Report*) enumerates 440 springs and geysers within this territory, including twenty-six distinct geysers. The Upper Basin group includes, with others, the following: "Old Faithful," "Castle," "Bee Hive," "Giant," "Giantess," "Grotto," "Grand," "Oblong," "Splendid," "Comet," "Fan," "Mortar," "Riverside," "Turban," "Saw Mill," "Lion," and "Lioness." These are scattered over the surface of the basin, chiefly along the river bank, "Old Faithful" being at the southern extremity, and the "Fan," "Mortar," and "Riverside" at the northern end,

near where the wagon road enters the basin. The "Grotto," "Giant," "Oblong," and "Castle" are near the road. The "Bee Hive," with its handsome cone, from which the geyser takes its name, together with the "Giantess" and "Lion" group, is upon the opposite side of the river from the hotel. The "Lone Star" Geyser, celebrated on account of the size and beauty of its cone, is between four and five miles south of the hotel. On the new road leading to the "Lone Star," or near it, is a picturesque fall known as Kepler's Cascade. Many beautiful springs are in proximity to the geysers, forming objects of interest second only to the mammoth fountains of hot water. The pools have generally great depth and clearness, and the beholder can examine minutely the delicate formations far beneath the surface. The edges are in many cases scalloped and variously tinted, causing the deep blue spring and its exquisitely colored border to resemble a mammoth flower. One spring bears the appropriate name of the "Morning Glory." The subterranean forces are never at rest, and the Upper Geyser Basin at all times presents a strikingly weird scene. Strange sights and sounds greet the visitor on every side. Clouds of steam arise from a dozen different localities, some of the springs being hidden in the timber which covers the neighboring mountain-sides. In the vicinity of the geysers there are hissing, gurgling, and thunderous thuds, as if the imps of the infernal regions had heavy contracts of labor to perform. The eruption of any of the great geysers is heralded by the escape of steam from an adjacent steam vent; and directly after a fountain of hot water is thrown into the air with fearful belchings, to fall again in a giant cataract. Almost constantly there is a display of some kind going on, and the strange din is kept up night and day. There are daily eruptions of some of the geysers, while others have longer intervals of quiescence. "Old Faithful" makes a magnificent display once an hour, and is one of the handsomest geysers in the park.

From the Upper Geyser Basin to Yellowstone Lake.

After our sojourn in the Upper Geyser Basin, we shall resume our wagon journey through the park, leaving Monday morning for the new hotel at the outlet of Yellowstone Lake. The road passes over the high divide between the Madison River system and the Yellowstone River. The traveler returns to the Lower Geyser Basin, and then ascends the East Fork of the Firehole River about ten miles, the stream being forded several times., As the heights beyond are climbed, a beautiful panorama of forest and mountain scenery is unfolded to view. After passing through the forest-clad heights, Mary's Lake, a silvery sheet of water which lies at an elevation of 8,336 feet, is reached. Descending the east slopes into Hayden valley, which comprises the drainage area lying east of these mountains and between Elephant's Back (near the lake) and the falls, some magnificent views are had of Mount Washburne,— which rises in the south, and nearly in the centre of the park, to the altitude of 10,346 feet,— of its near neighbor, Dunraven Peak (9,988 feet), and the more distant Specimen Ridge. On approaching the Yellowstone River the road forks, and we turn southward towards the lake, which is about eight miles distant. An object of especial interest on this part of the road is the "Mud Geyser" or "Giant Cauldron." A circular pit, or crater, is seen in the side of a hill west of the roadway. The pit is about twenty feet in depth; and on one side, at the bottom, is a cavernous opening, from which waves of mud are emitted with great force. There was formerly a vigorous mud geyser on the opposite ide of the road, a short distance beyond

Yellowstone Lake.

This large and beautiful sheet of water lies at an elevation of 7,741 feet, according to the latest measurements of the United States Geological Survey. It covers a

superficial area of 139 square miles, with an irregular shore line of about 100 miles, and is the largest lake in North America at this altitude. Upon a bluff at the entrance of a little bay near the outlet, a new and commodious hotel has been built. The view from this point is charming. In the southeast are some of the highest mountains in the park — including Eagle Peak (11,100 feet), Silver Tip (10,000 feet), Mount Chittenden (10,000 feet), Cathedral Peak (10,500 feet), Mounts Doane, Langford, and Stevenson (all three over 10,000 feet), and other landmarks of the Absaroka, or Hoodoo range. In the south are Flat Mountain, Mount Hancock, and Mount Sheridan (10,200). The latter is the highest of the Red Mountains, near Heart Lake. These peaks are blue in the distance, and the scenery is suggestive of the picturesqueness of the Swiss lakes. About three and a half miles from the hotel, at an elevation of 8,000 feet above the sea, is a natural bridge. A little stream has worn its way down through a rock wall, and directly under the arch is a fall of about forty feet.

The Falls and Grand Cañon of the Yellowstone.

Leaving the Lake Hotel Tuesday morning, we shall proceed to Yellowstone Falls and the Grand Cañon of the Yellowstone. We retrace our way past the "Mud Geyser," and thence follow down the river bank past Sulphur Mountain. This latter is an extensive deposit of sulphur in a region of hot springs, one of which, at the base of the hill near the road, is especially active.

Upon an elevated plateau above the river, nearly a mile from the former house, a new and capacious hotel, fitted up with modern improvements, has been built. In its approach to the hotel the road crosses Cascade Creek, just above the pretty Crystal Cascades. The Yellowstone Falls are two in number. At the head of the Upper Fall the river has a width of about eighty feet, and the waters plunge over a shelf

between walls that are from 200 to 300 feet in height, upon a partially submerged reef 109 feet below. Dense clouds of spray and mist veil fully one third of the cataract from view.

Half a mile below this fall is the Lower or Great Fall, which is grander and more impressive than the other, though not more picturesque. Here the waters pour into the fearful abyss of the Grand Cañon, the sheer descent being 308 feet. The wooded slopes of the gorge tower far above the flood, and one has to descend a steep incline to reach a platform which serves as a good view point at the verge of the fall. The best views, however, are had farther down the trail, where many favoring points afford an outlook into the wonderful cañon. Clouds of mist ascend from the foot of the falls, and the walls are covered with a rank growth of mosses and *algæ*.

The cañon may well be considered the greatest of the park marvels. The height of the plateau at the falls is 7,800 feet. It increases slightly northeastward, until, in passing the mountains, it has an elevation of about 8,000 feet. Thence northward it decreases in height rapidly, and at the mouth of Tower Creek it reaches but 7,200 feet. At the head of the upper fall the river level is but a few feet below the top of the plateau. This fall adds 109, and the lower fall 308, feet to the depth of the chasm. From the foot of this fall to the mouth of East Fork, the total descent is 1,304 feet in a distance of twenty-four miles, being an average of 54.3 per mile. As far as the extremity of the Washburne Mountains, a distance of twelve miles, the cañon continues to increase in depth, both by the fall of the stream and the rise of the plateau; and the extreme depth, 1,200 feet, is attained at this point. Thence the depth decreases rapidly, and at the mouth of Tower Creek it is but 500 or 600 feet deep on the west side, and about 1,000 feet on the east side. Cold topographical facts and figures are quickly forgotten when the beholder gazes down into the gigantic rift.

Neither pen nor pencil can do justice to this marvel of nature. There may be deeper cañons elsewhere, but they cannot exceed in impressive beauty the marvelously pictured rift through which the Yellowstone winds its way after its last grand leap. A narrow trail runs along the western edge, and there are many jutting points from which new vistas are opened through this enchanted land. The walls are in places perpendicular, though generally sloping; while at the bottom is the fretted and fuming river, a ribbon of silvery whiteness or deep emerald green. Along the bottom of the cañon are domes and spires of colored rock, some of them hundreds of feet in height, yet reduced to much smaller proportions by the distance. On the apex of one of these pillars is an eagle's nest. But the gorgeous coloring of the cañon walls is its distinguishing feature. The beholder is no longer left in doubt as to the reason for bestowing the name of Yellowstone upon this remarkable river. The beautifully saffron-tinted walls give the explanation. There are other tints in opulence. Crimsons and greens are seen with all their gradations and blendings. Emerald mosses and foliage form the settings for dashes of bright rainbow colors. The yellows, due to sulphur deposit, predominate; but the oxidation of iron through the many hot springs, which send up their clouds of steam even here, provides a liberal sprinkling of reds. It seems as if a gorgeous sunset or a shattered rainbow had fallen into the abyss. With the grand grouping of crags and pinnacles, tinted walls, and the beautiful falls, the picture is one that, once seen, can never be forgotten.

From the Cañon to the Mammoth Hot Springs.

From the Grand Cañon of the Yellowstone a road extends directly west to Norris Geyser Basin, which is about a dozen miles distant. The latter part of the way is beside the upper Gibbon River. The Virginia Cascades, which are at the side of the stage

road, form one of the prettiest sights in the park. From the Norris Geyser Basin Hotel, where we dine, we proceed to Mammoth Hot Springs, arriving at the latter point in the afternoon.

It may be deemed advisable to divide the party for the round of the park. In that case one section will reverse the order of travel described in the foregoing pages.

From the Yellowstone National Park Eastward.

Taking our departure from the hotel at Mammoth Hot Springs Thursday (August 20 and September 3) by stage, the party will proceed to Cinnabar, where our vestibuled train of Pullman palace cars will be in waiting. Our route takes us back to Livingston on the Park Branch, and then eastward on the main line of the Northern Pacific Railroad. For some 350 miles we follow the banks of the Yellowstone. Billings, named in honor of Hon. Frederick Billings, a former president of the Northern Pacific Railroad, is a flourishing town of 1,500 inhabitants, 1,020 miles from Tacoma and 891 miles from St. Paul. Twenty-eight miles east of Billings is Pompey's Pillar, a mass of sandstone about 400 feet high, on the side of which Captain William Clark, the explorer, carved his name July 25, 1806. At Big Horn the railroad passes through a tunnel 1,100 feet long, and immediately after crosses the Big Horn River on a bridge 600 feet in length. Custer, Forsyth, and Miles City are places named in honor of military heroes. The latter is a young city of considerable importance, and a few miles west of it is Fort Keogh. Friday afternoon we shall reach Glendive, a growing town near the eastern line of Montana and the last point of importance within that State.

North Dakota.

Thirty-six miles east of Glendive and one mile west of Sentinel Butte, we pass out of Montana, through which we have journeyed on the main line of railway 780 miles.

The succeeding 367 miles lie within the new State of North Dakota. Both North and South Dakota were admitted to statehood in 1889, together with Montana and Washington. The former has a population of 182,425.

Pyramid Park or the "Bad Lands."

On entering North Dakota we soon find ourselves in the famous "Bad Lands." The mighty forces of water and fire have here wrought strange confusion. Buttes from fifty to 150 feet high are seen, with rounded summits and steep sides, and with variegated bands of color. The black and brown stripes are due to veins of impure lignites, from the burning of which are derived the shades of red; while the raw clay varies from a glaring white to a dark gray. The mounds are in every conceivable form, and are composed of different varieties of argillaceous limestone, friable sandstone, and lignite, lying in successive strata. The coloring is very rich. Between these curiously shaped elevations are ravines and gulches through which streams meander; and there are occasional park-like tracts that afford nutritious grazing for cattle. The term "Bad Lands," as applied to this region and generally understood, is certainly a misnomer. The old French *voyageurs* described the region as "*mauvaises terres pour traverser*," meaning that it was a difficult country to travel through, and the term has been carelessly translated and shortened into "Bad Lands."

Eastward from the "Bad Lands."

The region lying east of the remarkable section just referred to is devoted chiefly to cattle grazing. The appearance of the country is that of a rough, rolling prairie, with here and there a bold elevation in butte form. At Mandan, an important railroad town and the county seat of Morton county, the time changes from Mountain, or 105th

meridian, to Central, or 90th meridian standard. Between Mandan and Bismarck, the railroad crosses the Missouri River on a magnificent three-pier iron bridge, which cost $1,000,000. The thriving city of Bismarck, which lies on the east side of the Missouri, is the capital of North Dakota. Jamestown is another flourishing place, and east of there we pass through the great Red River wheat belt. The famous Dalrymple farms comprise some 75,000 acres of land. Fargo, the financial metropolis of the Red River valley, is a stirring city of 12,000 inhabitants. It is situated 251 miles from St. Paul. Its wide avenues, lined with business edifices, present an attractive appearance. Across the Red River, on the Minnesota bank, is the handsome city of Morehead.

Minnesota.

The State of Minnesota, which we enter at Morehead, embraces 83,530 square miles, and in 1890 contained a population of 1,300,017. Its elevation is from 1,000 to 1,800 feet above the ocean, and there are within its borders upwards of 7,000 small lakes. The Northern Pacific Railroad traverses this great empire of the West from the Red River to St. Paul, and in an important easterly extension from Brainerd to Duluth and Ashland, on the shores of Lake Superior. There are also several important branches. Among the principal towns passed through during this part of our journey are Glyndon, Lake Park, Detroit (which is beautifully situated near Detroit Lake), Perham, Wadena, Verndale, Little Falls, Sauk Rapids, and Anoka.

Minneapolis.

The parties will reach Minneapolis Saturday forenoon, and there will be a transfer from the Union station to the magnificent West Hotel, corner of Hennepin avenue and Fifth street. The West is one of the largest and most elegant hotels in the country, having been completed at a cost for building and furnishing of about $2,000,000.

Although less than thirty years old, Minneapolis has a population of 164,780,— an increase of 117,893 in ten years,— and its builders can hardly keep pace with the demands of trade and the calls of new-comers for residences. Its streets and avenues are spacious, and, in many instances, lined with trees; while its business blocks are among the most substantial and elegant in the country. Its immense manufacturing interests are headed by twenty-three flouring mills, with a daily capacity of 29,000 barrels and an export trade of 1,500,000 barrels per annum, and nineteen lumber mills, which cut 300,000,000 feet of lumber each year. The utilized water-power of the Falls of St. Anthony amounts to 130,000 horse-power, at low water-mark. The manufacturing interests aggregate nearly $50,000,000. There will be a carriage ride Saturday afternoon through the most interesting business and residence sections of the city, and out to the picturesque Falls of Minnehaha.

St. Paul.

Monday morning the party will proceed from Minneapolis to the sister city of St. Paul, only ten miles distant. There will be a transfer from the Union station in the latter city to the elegant Hotel Ryan. St. Paul is a city of recent and very rapid growth, although the oldest-settled portion of that empire of the Northwest, Minnesota. It was long an Indian town, and in 1680 was visited by Father Hennepin. The first white settlement was founded in 1838, and a Catholic mission was called St. Paul's; hence the name of the city. The town was incorporated in 1849, with a population of 400, and the city in 1854, with a population of 4,500. The St. Paul of to-day has a population of 133,156, according to the recent census, and is one of the handsomest, as well as one of the busiest cities in America. Its wholesale trade amounts to over $72,000,000 per year. It is the capital of the State and the county seat of Ramsey county. Its

situation, at the head of navigation on the Mississippi River, was at the outset greatly in its favor, and the centering here of the great railway systems of the Northwest has given it still greater importance. The public buildings of St. Paul, and many of the business edifices, are truly magnificent structures. Summit avenue, which leads toward Fort Snelling, is lined with handsome residences. The fort is situated on the high banks of the Mississippi River near the mouth of the Minnesota River.

From St. Paul Eastward.

Going on board our vestibuled Pullman train at the Union station in St. Paul, Tuesday evening, we shall proceed eastward over the Wisconsin Central line to Chicago. This route takes us through Eastern Minnesota and the central section of Wisconsin, *via* Chippewa Falls, Abbotsford, Stevens's Point, Oshkosh, Fond du Lac, Waukesha, and Burlington, all within the latter State. The line forms an extension of the Northern Pacific Railroad, and through cars are run by this route between Chicago and Northwest Pacific Coast points. The morning will find us near the famous springs at Waukesha, where we shall make a brief stay. The magnificent station of the Wisconsin Central line in Chicago, corner Polk street and Fifth avenue, will be reached about 11.00 A. M., and there will be an omnibus transfer therefrom to the Sherman House, which is situated at the corner of Clark and Randolph streets.

Chicago.

During the stay in Chicago, which will extend from Wednesday morning until Thursday afternoon, there will be no programme of action, the members of the party devoting their time to their own uses, as individual tastes may dictate. The Sherman House is very centrally located, and all parts of the city may easily be reached therefrom by cable cars and other street-car lines.

From Chicago Eastward.

There will be an omnibus transfer from the Sherman House to the Dearborn station, between Polk and Taylor streets, and Third and Fourth avenues, Thursday noon (August 27 and September 10), and the route eastward from Chicago will be over the Chicago & Grand Trunk Railway and its Grand Trunk connection from Port Huron. The train will leave the Dearborn station at 12.00 M., and proceed eastward *via* Valparaiso and South Bend, Ind., Battle Creek, Lansing, and Flint, Mich., etc. Dinner and supper will be provided on a Chicago & Grand Trunk dining-car.

Persons returning from Chicago independently will be required to exchange their passage and sleeping-car coupons either at the city office of the Chicago & Grand Trunk Railroad, 103 South Clark street, Chicago, E. H. Hughes, agent, to whom any application in advance for sleeping-car berths can be addressed, or at the Dearborn station. In order to avail themselves of the stop at Niagara Falls, passengers should leave Chicago by the "Limited Express" at 3.15 P. M. Niagara Falls is the only point east of Chicago where "stop-over" privileges can be allowed.

Niagara Falls.

The train will arrive at Niagara Falls at 8.00 A. M. (Eastern standard time) Friday morning, and there will be an omnibus transfer from the station to the International Hotel or Cataract House, where breakfast and dinner will be had. The forenoon can be spent in an inspection of the great cataract and the other attractions of the place, the time being ample for a round of all the chief points of interest. The hotels are in proximity to Prospect Park, the rapids, the entrance to Goat Island, and the new Suspension Bridge that leads across to the Canada shore just below the falls. After dinner there will be an omnibus transfer to the New York Central station, from whence the train will depart eastward at 4.48 P. M. *via* the West Shore line. Boston

will be reached over the Fitchburg Railroad at 9.50 A. M. the succeeding day (Saturday, August 29, and Saturday, September 12).

Price of Tickets.

The price of tickets for the excursion, as described in the foregoing pages, will be FIVE HUNDRED DOLLARS. This sum will cover first-class travel over all railway and steamer routes going and returning, with double berths in Canadian Pacific, Pullman and Wagner sleeping-cars; all stage rides to and throughout the Yellowstone National Park; hotel accommodations according to the itinerary, for the period of the regular tour (fifty days), with sojourns at Montreal, Banff Hot Springs, Seattle, Tacoma, Portland, Mammoth Hot Springs, Lower Geyser Basin, Upper Geyser Basin, Yellowstone Lake, Yellowstone Grand Cañon, St. Paul, Minneapolis, and Chicago; stateroom berths and meals on the steamer "Queen" during the Alaska voyage; meals in dining-cars, at hotels, dining-stations, or on other steamers *en route;* omnibus or carriage transfers from railway stations or steamers to hotels, and *vice versa*, wherever the same may be needed (Montreal, Banff Hot Springs, Victoria, Seattle, Tacoma, Portland, Minneapolis, St. Paul, Chicago, and Niagara Falls); carriage rides in Montreal, Portland, Minneapolis, and St. Paul; all expenses for transportation, transfer, and care of baggage to the extent of 150 pounds for each person (except in the Yellowstone National Park, where only hand luggage will be taken), all excess of 150 pounds being liable to excess charges at regular transportation rates; and the services of conductors.

EXTRA SLEEPING-CAR ACCOMMODATIONS.— Members of the party who desire extra sleeping-car accommodations can secure the same at regular through rates, notwithstanding the frequent halts made during the journey. The cost of an extra double berth (giving an entire section to one person), for the journey between Montreal and Vancouver, is $20. Drawing-rooms cars are used in the earlier journey.

The charges for an extra double berth (giving an entire section to one person), from Tacoma to Portland and from Portland to Boston, is $25. The side trip from Portland to Dalles City, with sleeping-car accommodations for one night, is included in these rates.

ITINERARY.

SATURDAY, July 11. First Party.
SATURDAY, July 25. Second Party.

First Day.— Leave Boston 8.45 A. M., from the station of the Boston & Lowell system of the Boston & Maine Railroad, Causeway street, in a train of drawing-room cars. On arrival at the station members of the party should check their baggage to Montreal. The checks will be taken up on the train. Tags are supplied with the excursion tickets, and these, with the owner's name and home address plainly inscribed thereon, should be attached to every trunk, valise, or other piece of baggage, to serve as a ready means of identification. Hand luggage must be looked after by the owners. Proceed northward *via* Lowell, Nashua, Manchester, Concord, Plymouth, Wells River, St. Johnsbury, Newport, etc., *via* Boston & Maine, Concord & Montreal, and Canadian Pacific lines; dinner at the Pemigewasset House, Plymouth, N. H.; arrive in Montreal (Windsor street station) at 8.30 P. M.; omnibus transfer to Windsor Hotel, George Swett, manager.

SUNDAY, July 12. First Party.
SUNDAY, July 26. Second Party.

Second Day.— In Montreal.

MONDAY, July 13. First Party.
MONDAY, July 27. Second Party.

Third Day.— In Montreal. Carriage ride in the morning, visiting the principal churches, the Grey Nunnery, Mount Royal Park, etc. Omnibus transfer from the Windsor Hotel to the Windsor street station of the Canadian Pacific Railway, and leave Montreal by said line at 9.30 P. M. in a train of elegant Canadian Pacific sleeping-cars, with dining-cars.

NOTE.—During the journey over the Canadian Pacific Railway, meals will be furnished on the splendidly appointed dining-cars run by this line.

TUESDAY, July 14. First Party.
TUESDAY, July 28. Second Party.

Fourth Day.— On the Canadian Pacific Railway *en route* westward through the Province of Ontario.

WEDNESDAY, July 15. First Party.
WEDNESDAY, July 29. Second Party.

Fifth Day.— On the Canadian Pacific Railway *en route* through the Province of Ontario.

NOTE.— Railway time changes at Port Arthur from Eastern standard, or 75th meridian, to Central standard, or 90th meridian, one hour slower.

THURSDAY, July 16. First Party.
THURSDAY, July 30. Second Party.
Sixth Day.— On the Canadian Pacific Railway *en route* through the Province of Manitoba. Arrive at Winnipeg 11.00 A. M.; leave Winnipeg at 4.20 P. M.

NOTE.— Railway time changes at Brandon from Central standard, or 90th meridian, to Mountain standard, or 105th meridian, one hour slower.

FRIDAY, July 17. First Party.
FRIDAY, July 31. Second Party.
Seventh Day.— On the Canadian Pacific Railway *en route* through the Districts of Assiniboia and Alberta.

SATURDAY, July 18. First Party.
SATURDAY, August 1. Second Party.
Eighth Day.— Arrive at Banff 9.30 A. M.; coach transfer to the Banff Springs Hotel, W. L. Mathews, manager, in the Canadian National Park.

SUNDAY, July 19. First Party.
SUNDAY, August 2. Second Party.
Ninth Day.— At the Banff Springs Hotel.

MONDAY, July 20. First Party.
MONDAY, August 3. Second Party.
Tenth Day.— Coach transfer from the hotel to the station, and at 8.30 A. M. leave Banff, and proceed westward on the Canadian Pacific Railway through British Columbia; arrive at Glacier House 4.30 P. M. The train will here be side tracked, and remain until the early morning of the ensuing day, giving the passengers ample time to visit the great glacier of the Selkirks, which is near at hand. The party will sleep on the cars.

NOTE.— Railway time changes at Donald from Mountain standard, or 105th meridian, to Pacific standard, or 120th meridian — one hour slower.

TUESDAY, July 21. First Party.
TUESDAY, August 4. Second Party.
Eleventh Day.— Leave Glacier House 4.30 A. M., and proceed westward on the Canadian Pacific Railway through British Columbia, passing through the lake region and through the cañons of the Thompson and Fraser Rivers; arrive at Vancouver at a late hour of the night, and remain upon the cars until morning.

WEDNESDAY, July 22. First Party.
WEDNESDAY, August 5. Second Party.
Twelfth Day.— Spend the forenoon in Vancouver; taking breakfast and dinner at the Hotel Vancouver, Sherman S. Gere, manager; leave Vancouver at 2.00 P. M. on Canadian Pacific Navigation Company's

steamer for Victoria; supper on board the boat; arrive at Victoria 7.30 P. M.; coach transfer from the Hudson Bay Company's wharf to the outer wharf, where the Pacific Coast Steamship Company's Alaska steamer, "The Queen," will be in waiting.

NOTE.— The second party will depart from Victoria one day later in the week than the first party. The intervening time between its arrival and departure will be spent in Victoria.

THURSDAY, July 23. First Party. *Thirteenth Day.* FRIDAY, August 7. Second Party. *Fourteenth Day.*	On the Alaska voyage.
FRIDAY, July 24. First Party. *Fourteenth Day.* SATURDAY, August 8. Second Party. *Fifteenth Day.*	On the Alaska voyage.
SATURDAY, July 25. First Party. *Fifteenth Day.* SUNDAY, August 9. Second Party. *Sixteenth Day.*	On the Alaska voyage.
SUNDAY, July 26. First Party. *Sixteenth Day.* MONDAY, August 10. Second Party. *Seventeenth Day.*	On the Alaska voyage.
MONDAY, July 27. First Party. *Seventeenth Day.* TUESDAY, August 11. Second Party. *Eighteenth Day.*	On the Alaska voyage.
TUESDAY, July 28. First Party. *Eighteenth Day.* WEDNESDAY, August 12. Second Party. *Nineteenth Day.*	On the Alaska voyage.
WEDNESDAY, July 29. First Party. *Nineteenth Day.* THURSDAY, August 13. Second Party. *Twentieth Day.*	On the Alaska voyage.
THURSDAY, July 30. First Party. *Twentieth Day.* FRIDAY, August 14. Second Party. *Twenty-first Day.*	On the Alaska voyage.
FRIDAY, July 31. First Party. *Twenty-first Day.* SATURDAY, August 15. Second Party. *Twenty-second Day.*	On the Alaska voyage.
SATURDAY, August 1. First Party. *Twenty-second Day.* SUNDAY, August 16. Second Party. *Twenty-third Day.*	On the Alaska voyage.
SUNDAY, August 2. First Party. *Twenty-third Day.* MONDAY, August 17. Second Party. *Twenty-fourth Day.*	On the Alaska voyage.
MONDAY, August 3. First Party. *Twenty-fourth Day.* TUESDAY, August 18. Second Party. *Twenty-fifth Day.*	Return from the Alaska voyage, landing at Victoria, Port Townsend, Seattle, and Tacoma.

NOTE.—The vessel remains at Port Townsend long enough to permit of an inspection of that city. Both Seattle and Tacoma will also be visited, and for the better accommodation of all it may be deemed advisable to divide the party into two divisions, one of which will visit Seattle first and the other Tacoma. The Rainier, F. D. Ray, manager, in Seattle, and The Tacoma, Fred. L. Presbrey, manager, in Tacoma, will be made the sojourning-places in those cities, and there will be coach transfers to and from the hotels.

TUESDAY, August 4. First Party. *Twenty-fifth Day.*
WEDNESDAY, August 19. Second Party. *Twenty-sixth Day.*
} In Seattle and Tacoma. The Seattle party will leave that city at 2.00 P. M., and arrive in Tacoma at 3.55 P. M. The Tacoma party will leave that city at 2.25 P. M., and arrive in Seattle at 4.35 P. M. The transfers between the two cities will be made *via* the Northern Pacific Railroad.

WEDNESDAY, August 5. First Party. *Twenty-sixth Day.*
THURSDAY, August 20. Second Party. *Twenty-seventh Day.*
} In Seattle and Tacoma. Leave Seattle at 8.35 P. M. and Tacoma at 10.30 P. M., *via* Northern Pacific Railroad, in vestibuled train of Pullman palace cars.

THURSDAY, August 6. First Party. *Twenty-seventh Day.*
FRIDAY, August 21. Second Party. *Twenty-eighth Day.*
} Arrive in Portland about 6.00 A. M.; breakfast on dining-car; leave Portland at 9.00 A. M. *via* Union Pacific Railroad; arrive at Multnomah Falls 10.45 A. M., and stop to view the falls; arrive at Bonneville 12.45 P. M.; dinner at station dining-rooms; arrive at Dalles City 4.00 P. M.; supper at the Umatilla House; remain on the sleeping-cars at night.

FRIDAY, August 7. First Party. *Twenty-eighth Day.*
SATURDAY, August 22. Second Party. *Twenty-ninth Day.*
} Leave Dalles City on one of the Union Pacific Railway Company's steamers at 7.00 A. M. for a descent of the Columbia River; breakfast on the boat; arrive at the Upper Cascades 11.30 A. M.; transfer by narrow-gauge railway to the Lower Cascades (six miles), and leave there at 12.15 P. M. by steamer; dinner on the boat; arrive at Portland 4.30 P. M.; omnibus transfer from the Ash street wharf to The Portland, Charles E. Leland, manager.

SATURDAY, August 8. First Party. *Twenty-ninth Day.*
SUNDAY, August 9. First Party. *Thirtieth Day.*
SUNDAY, August 23. Second Party. *Thirtieth Day.*
} In Portland.

NOTE.—There will be a carriage ride in the course of the stay in Portland, the first party going Saturday or Monday, and the second party Monday. The ride will be through the finest residence and busi-

ness sections of the city and to the park, which affords a magnificent view of Portland and its picturesque surroundings, with Mount Hood, Mount St. Helen's, etc.

MONDAY, August 10. First Party.
MONDAY, August 24. Second Party.
Thirty-first Day. In Portland. Omnibus transfer from The Portland to the station of the Northern Pacific Railroad, and leave Portland at 7.00 P. M. in a vestibuled train of Pullman palace cars.

NOTE.—During the trip over the Northern Pacific Railroad, meals will be served on one of the elegant dining-cars run by this road.

TUESDAY, August 11. First Party.
TUESDAY, August 25. Second Party.
Thirty-second Day. On the Northern Pacific Railroad *en route* eastward over the Cascade Division through the State of Washington.

WEDNESDAY, August 12. First Party.
WEDNESDAY, August 26. Second Party.
Thirty-third Day.—On the Northern Pacific Railroad *en route* eastward through Idaho and Montana.

NOTE.—Railway time changes at Hope, Id., from Pacific standard, or 120th meridian, to Mountain standard, or 105th meridian, one hour faster.

THURSDAY, August 13. First Party.
THURSDAY, August 27. Second Party.
Thirty-fourth Day.—Arrive at Livingston 2.00 A. M.; thence *via* the National Park Branch of the Northern Pacific Railroad; arrive at Cinnabar at an early morning hour; leave Cinnabar by George W. Wakefield's stage line at 8.30 A. M.; arrive at Mammoth Hot Springs Hotel at 10.30 A. M.

FRIDAY, August 14. First Party.
FRIDAY, August 28. Second Party.
Thirty-fifth Day.—Leave Mammoth Hot Springs in George W. Wakefield's stages at 8.00 A. M., for the tour through the park; arrive at Norris Geyser Basin 12.30 P. M.; dinner there; leave Norris Geyser Basin 1.30 P. M., passing near the principal geysers in this basin, including the "New Crater," the "Monarch," and later near the Gibbon Falls; arrive at the Lower Geyser Basin Hotel 6.30 P. M.

SATURDAY, August 15. First Party.
SATURDAY, August 29. Second Party.
Thirty-sixth Day.—Leave Lower Geyser Basin at 8.00 A. M., and visit the "Fountain" Geyser, the "Mammoth Paint Pots," etc.; then continue to the Midway Geyser Basin, which contains the "Excelsior" Geyser ("Hell's Half Acre"), "Turquoise" Spring, and "Prismatic" Lake; arrive at the Upper Geyser Basin Hotel 11.00 A. M. The hotel is situated near "Old Faithful," the "Bee Hive," "Giantess," "Castle," and others of the great geysers.

SUNDAY, August 16. First Party.
SUNDAY, August 30. Second Party.
Thirty-seventh Day.— At the Upper Geyser Basin.

MONDAY, August 17. First Party.
MONDAY, August 31. Second Party.
Thirty-eighth Day.— Leave Upper Geyser Basin 8.00 A. M., and proceed to Yellowstone Lake *via* Trout Creek route; arrive at Trout Creek 1.00 P. M.; lunch there; leave Trout Creek 2.00 P. M.; arrive at Yellowstone Lake 5.00 P. M.

TUESDAY, August 18. First Party.
TUESDAY, Sept. 1. Second Party.
Thirty-ninth Day.— Leave Yellowstone Lake 10.00 A. M.; arrive at Grand Cañon Hotel 1.00 P. M.

WEDNESDAY, August 19. First Party.
WEDNESDAY, Sept. 2. Second Party.
Fortieth Day.— Leave Grand Cañon Hotel 10.30 A. M.; arrive at Norris Geyser Basin 12.30 P. M.; dinner there; leave Norris Geyser Basin 1.30 P. M.; arrive at Mammoth Hot Springs Hotel 5.00 P. M.

NOTE.— In case it is deemed advisable to divide the party for the round of travel through the park, one division will reverse the foregoing itinerary.

THURSDAY, August 20. First Party.
THURSDAY, Sept. 3. Second Party.
Forty-first Day.— Leave Mammoth Hot Springs 2.00 P. M.; arrive at Cinnabar 3.15 P. M.; leave Cinnabar, *via* National Park Branch of the Northern Pacific Railroad, 3.45 P. M.; arrive at Livingston 6.45 P. M; leave Livingston 8.30 P. M. on Northern Pacific Railroad, main line.

FRIDAY, August 21. First Party.
FRIDAY, Sept. 4. Second Party.
Forty-second Day.— On the Northern Pacific Railroad *en route* through Montana and North Dakota.

NOTE.— Railway time changes at Mandan, N. D., from Mountain standard, or 105th meridian, to Central standard, or 90th meridian — one hour faster.

SATURDAY, August 22. First Party.
SATURDAY, Sept. 5. Second Party.
Forty-third Day.— On the Northern Pacific Railroad *en route* through Minnesota. Arrive at Minneapolis 12.10 P. M.; omnibus transfer to the West Hotel, John T. West, proprietor; in the afternoon, carriage ride, with visits to Minnehaha Falls, the chief business and residence sections of the city, the great flouring mills (the largest in the world), the bridge below St. Anthony's Falls, the Exposition Building, the Suspension Bridge, etc.

SUNDAY, August 23. First Party.
SUNDAY, Sept. 6. Second Party.
Forty-fourth Day.— In Minneapolis.

MONDAY, August 24. First Party.
MONDAY, Sept. 7. Second Party.

Forty-fifth Day.— Omnibus transfer from the West Hotel to the Union station, and leave Minneapolis at 12.45 A. M. *via* the Wisconsin Central Railway; arrive in St. Paul 1.25 P. M.; omnibus transfer to the Hotel Ryan, Eugene Mehl & Son, proprietors; in the afternoon carriage ride, visiting the chief business and residence portions of the city, the Capitol, Summit avenue, the Observatory (midway between St. Paul and Minneapolis, and affording a view of both cities), Fort Snelling, etc.

TUESDAY, August 25. First Party.
TUESDAY, Sept. 8. Second Party.

Forty-sixth Day.— In St. Paul. Omnibus transfer to the Union station, and leave St. Paul, *via* Wisconsin Central Railway, at 7.30 P. M.

WEDNESDAY, August 26. First Party.
WEDNESDAY, Sept. 9. Second Party.

Forty-seventh Day.— Breakfast on Wisconsin Central dining-car; arrive in Chicago 11.00 A. M.; transfer by Parmelee's omnibus line from the Wisconsin Central Railroad station (corner Polk street and Fifth avenue) to the Sherman House, J. Irving Pierce, proprietor.

THURSDAY, August 27. First Party.
THURSDAY, Sept. 10. Second Party.

Forty-eighth Day.— In Chicago. Omnibus transfer from the Sherman House to the Dearborn station (Polk and Dearborn streets), and leave Chicago at 12.00 M. *via* Chicago & Grand Trunk Railway; dinner and supper on Chicago & Grand Trunk dining-car.

NOTES.— Members of the party who return independently from Chicago eastward will be required to exchange their east-bound passage and sleeping-car coupons at the city ticket office of the Chicago & Grand Trunk Railway, 103 South Clark street, E. H. Hughes, agent (to whom all applications in advance for sleeping-berths should be addressed), or at the station ticket office (Dearborn station, Polk and Dearborn streets). The regular trains leave Chicago at 3.15 P. M. and 8.15 P. M. Persons desirous of availing themselves of the "stop-over" privileges at Niagara Falls (the only point east of Chicago where "stop-offs" are permitted) can take the train leaving Chicago at 3.15 P. M., and, arriving at Niagara Falls the next morning, await there the departure of the afternoon train. Attention is also called to the fact that persons returning independently must exchange their sleeping-car coupons at other points than Chicago; viz. Portland and St. Paul (or Minneapolis).

Railway time changes at Port Huron, Mich., from Central standard, or 90th meridian, to Eastern standard, or 75th meridian — one hour faster.

FRIDAY, August 28. First Party.
FRIDAY, Sept. 11. Second Party.
} *Forty-ninth Day.*— From Port Huron eastward on Great Western Division of Grand Trunk Railway; arrive at Clifton, Ont., 8.20 A. M., and at Niagara Falls, N. Y., 9.00 A. M.; omnibus transfer to the Cataract House, John E. Devereaux, manager, or the International Hotel, International Hotel Company, proprietors; leave Niagara Falls, *via* the West Shore route, from the station of the New York Central & Hudson River Railroad, at 4.48 P. M.; arrive at Buffalo, N. Y., 5.40 P. M.; supper at station dining-rooms, Johnston Brothers, proprietors.

SATURDAY, August 29. First Party.
SATURDAY, Sept. 12. Second Party.
} *Fiftieth Day.*— From Rotterdam Junction eastward *via* Fitchburg Railroad; breakfast at the station dining-rooms, Athol, Mass., W. E. Wood, proprietor; arrive in Boston (station on Causeway street) at 9.50 A. M.

Table of Distances.

	MILES.
From Boston to Nashua, N. H., Boston & Maine Railroad system	40
" Nashua to Woodsville, N. H., Concord & Montreal Railroad	128
" Woodsville to Newport, Vt., Boston & Maine Railroad system, Northern Division	66
" Newport to Montreal, Canadian Pacific Railway	109
" Montreal to Vancouver, Canadian Pacific Railway	2,906
" Vancouver to Victoria, Canadian Pacific Navigation Company's steamer	84
" Victoria to Sitka and return to Seattle, Pacific Coast Steamship Company's steamer "Queen"—Victoria to Fort Wrangel (680 miles), Fort Wrangel to Juneau (199 miles), Juneau to Douglas Island (3 miles), Douglas Island to Chilkaht (89 miles), Chilkaht to Muir Glacier in Glacier Bay (191 miles), Muir Glacier to Sitka *via* Icy Strait (147 miles), Sitka to Nanaimo (1,027 miles if route *via* Juneau and Fort Wrangel is taken, or 745 outside Baranof Island and through Duke of Clarence Strait), Nanaimo to Victoria (78 miles), and Victoria to Seattle *via* Port Townsend (74 miles), distances given in nautical miles	2,488
Add to above for difference between nautical and geographical or statute miles	380
" Seattle to Tacoma, Northern Pacific Railroad	40
Distances carried forward	6,241

	MILES.
Distances brought forward	6,241
From Tacoma to Portland, Northern Pacific Railroad	145
" Portland to The Dalles, Or., Oregon Railway & Navigation Company's Railway	88
" The Dalles to Upper Cascades, steamer of the Oregon Railway & Navigation Company's River line	45
" Upper Cascades to Lower Cascades, Portage Railway	6
" Lower Cascades to Portland, steamer of the Oregon Railway & Navigation Company's River line	62
" Portland to Livingston, Northern Pacific Railroad	1,048
" Livingston to Cinnabar, Yellowstone Park Branch of Northern Pacific Railroad	51
" Cinnabar to Mammoth Hot Springs, stage	8
" Mammoth Hot Springs to Norris Geyser Basin, stage	19
" Norris Geyser Basin to Lower Geyser Basin, stage	24
" Lower Geyser Basin to Upper Geyser Basin, stage	11
" Upper Geyser Basin to Yellowstone Lake, stage	45
" Yellowstone Lake to Grand Cañon of the Yellowstone, stage	17
" Grand Cañon of the Yellowstone to Mammoth Hot Springs, stage	34
" Mammoth Hot Springs to Cinnabar, stage	8
" Cinnabar to Livingston, Yellowstone Park Branch of Northern Pacific Railroad	51
" Livingston to Minneapolis, Northern Pacific Railroad (main line)	996
" Minneapolis to St. Paul, and thence to Chicago, Wisconsin Central line	472
" Chicago to Port Huron, Chicago & Grand Trunk Railway	335
" Port Huron to Suspension Bridge, Southern Division of Grand Trunk Railway	181
" Suspension Bridge to Rotterdam Junction, N. Y., West Shore Railroad	296
" Rotterdam Junction to Boston, Fitchburg Railroad	212
Total	10,395

The following provinces, districts, states, and territories will be passed through in course of tour: *Dominion of Canada*—the Provinces of Quebec, Ontario, Manitoba,

and British Columbia(4), and the provisional districts of Assiniboia and Alberta (2). *United States* — the States of Massachusetts, New Hampshire, Vermont, Washington, Oregon, Idaho, Montana, Wyoming, North Dakota, Minnesota, Wisconsin, Illinois, Indiana, Michigan, and New York (15), and the Territory of Alaska (1); or altogether, 22 different geographical divisions of the two countries.

The return tickets from Portland or Tacoma will be good for six months. Persons returning independently can apply for information or assistance to our Pacific Northwest agent, Mr. Charles Kennedy, No. 83 First street, Portland, Or.

As the accommodations to be furnished on the steamer and in certain parts of the route are limited, the party will necessarily be restricted in numbers. Persons desirous of becoming members of the excursion party are earnestly requested to enroll their names at as early a date as possible. Tickets must be taken on or before Tuesday, July 7, for the first party, and Tuesday, July 21, for the second party.

W. RAYMOND.
I. A. WHITCOMB.

☞ Tickets for the excursion, additional copies of this circular, and all needed information can be obtained of

RAYMOND & WHITCOMB, 296 Washington St. (opposite School St.), Boston, Mass.

New York Office:

No. 257 Broadway,

RAYMOND & WHITCOMB.

Philadelphia Office,

111 SOUTH NINTH STREET, under Continental Hotel,

RAYMOND & WHITCOMB.

Chicago Office:

103 SOUTH CLARK STREET, cor. Washington Street,

E. H. HUGHES, Agent.

London Office, 142 Strand, W. C.

HENRY GAZE & SON,

European Agents for Raymond's American Excursions.

Agents on the Pacific Coast.

FOR SOUTHERN CALIFORNIA,

CHARLES C. HARDING, Agent.

The Raymond, East Pasadena, Cal.

(During the Winter and early Spring.)

LOS ANGELES OFFICE,

138 SOUTH SPRING ST.,

RAYMOND & WHITCOMB,

F. W. THOMPSON, Agent.

SAN FRANCISCO OFFICES,

26 MONTGOMERY STREET,

ROOM 6,

CARROLL HUTCHINS, Agent,

And also 36 MONTGOMERY STREET

(CORNER SUTTER STREET),

CLINTON JONES, Agent.

PORTLAND (Or.) OFFICE

No. 83 FIRST STREET,

CHARLES KENNEDY, Agent.

Clothing for the Journey.

Although warm weather is likely to be encountered in both the transcontinental journeys, making summer clothing desirable, woolen underwear is essential in the mountains and upon the Pacific Coast, and certainly in the altitudes of the Yellowstone National Park, where frosts are common in midsummer. For the Alaska trip one should dress as warmly as for an Atlantic ocean voyage, but no warmer, since that should mean woolens and wraps. Strong and serviceable clothing with stout shoes are prime necessities, both for Alaska and the National Park, and, as for that matter, for the tramps that are likely to be taken about Banff and at the glacier of the Selkirks. Ladies should remember that the decks of a steamer are always washed down in the morning, even without the aid of rain, and that trailing skirts are under such circumstances undesirable. In the saturated moss and grass, and perhaps mud, of the shore they are equally out of place. A gossamer for ladies, a mackintosh for gentlemen, rubber shoes or boots, and umbrellas all around, are likely to suggest themselves. It does not rain all the time in Alaska, and most of the sight-seeing is from the steamer's deck; but it is better to be prepared for little land expeditions in all weathers. The rains come frequently and with little heralding, making rubber garments and an umbrella useful companions. No rainy weather was encountered during any part of our voyage last year. Ladies who have crossed the ocean need not be told that closely fitting outer garments are more convenient on the breezy deck than loose cloaks or shawls. Walking over the glaciers is difficult and in places dangerous. Adventurous travelers are likely to do something of it, however, and all such know the value of spiked shoes and alpenstocks. It is not worth while to lumber one's luggage with the latter in starting from home, as something of the sort can be procured at Glacier House in the Selkirks, and of the baggage porter of the steamer on visit-

ing the Muir Glacier. Elsewhere they would not be of use. At the Muir Glacier, a landing may be desirable, but there is likely to be little traveling done except on the lateral moraines. The main ice stream, on account of its rapid motion, is badly broken and of rough surface, abounding in deep crevasses, which are constantly forming in unexpected places. Even the most intrepid investigators have thus far been able to explore only a limited section of the ice-covered area.

Garments which dust cannot injure, or "dusters" which protect the ordinary clothing, are useful in the railway journeys and likewise in the Yellowstone Park. Mosquitoes may be found at some points (chiefly about the glacier of the Selkirks), but before the middle of August they have wholly disappeared from the Yellowstone Park, where, in the earlier part of the season, they can be effectually guarded against with a piece of mosquito netting, worn over the face and neck, and a pair of gloves. Such provision, however, is hardly needed in any part of our journey, or, at least, no more than would be required at home.

Steamer chairs, if required, may generally be obtained of the stewards on the steamer, and also at Victoria. They can be leased for the voyage if returned in good condition.

GUIDE BOOKS, ETC.

Only a few of the books enumerated in these pages will be found of special value as companions on the tour. The others may prove useful for reference, or for preparatory or subsequent reading.

Dominion of Canada.

There are innumerable books about Canada, but little has been written in book-form about the scenery on the Canadian Pacific Railway. The most useful hand-

book for the traveler is the admirably prepared *Time Table, with Notes*, published by the company. An illustrated pamphlet entitled *The New Highway to the Orient*, also issued by the company, contains much of interest.

W. H. H. Murray has written a book of travel (1888) entitled *Daylight Land*. It is a glowing account of a journey over the Canadian Pacific Railway.

The New West (Winnipeg, 1888) is an account of the country lying between the great lakes and the Pacific, with statistics and sketches of business enterprises.

B. C. 1887, A Ramble in British Columbia, by J. A. Lees and W. J. Clutterbuck, is a book of travel issued in 1888.

Among the Selkirk Glaciers, by William Spottswood Green (London, 1890), is the fullest account of the Selkirk mountains yet published.

Alaska.

The earliest accounts of the region now denominated Alaska are probably to be found in the accounts of the early voyages of Captain Cook and Vancouver, and in J. Von Straehlin's *Account of the New Northern Archipelago* (published in London, 1774). A work by Baron Frederick von Wrangel on the Russian possessions in America was published in St. Petersburg in 1839.

There are many accounts of Alaska in United States government reports, and the speeches of Charles Sumner in the Senate (1867) and Nathaniel P. Banks in the House of Representatives (1868) will be perused with peculiar interest. Volume 28 of Hubert Howe Bancroft's *History of the Pacific States of North America* gives an historical sketch of the country, and popular accounts will be found in Hartwig's *Polar World*, *Hours at Home*, the *Atlantic Monthly* for June, 1867, *Harper's Magazine* for 1867 and 1869, *Lippincott's Magazine* for February and November, 1868, and the *American Journal of Science* for 1867 and 1881.

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Among the later books relating to Alaska are the following: —

Travel and Adventure in the Territory of Alaska, by Frederick Whymper (1869).

Alaska and its Resources, by William Healey Dall (1870).

Alaska and Missions on the North Pacific Coast, by Rev. Sheldon Jackson, D. D. (1880).

The Seal Islands of Alaska, by Henry W. Elliott (1881).

Among the Alaskans, by Julia McNair Wright (1883).

Fifth Avenue to Alaska, by Edwards Pierrepont (1884).

Along Alaska's Great River, by Frederick Schwatka (1885). Lieutenant Schwatka is also the author of an account of a voyage to Alaska printed in *Wonderland*, a pamphlet issued by the passenger department of the Northern Pacific Railroad yearly since 1886, and devoted to the Yellowstone National Park, the Pacific Northwest and Alaska. *A Journey Through Wonderland*, by Elia W. Peattie, issued by the Northern Pacific Railroad passenger department in 1890, is another work of the same kind.

Alaska, Its Southern Coast and the Sitkan Archipelago, by E. Ruhamah Scidmore (1885).

A Trip to Alaska, by George Wardman (1885).

Our Arctic Provinces, by Henry W. Elliott (1886).

Our New Alaska; or, The Seward Purchase Vindicated, by Charles Hallock (1886).

Report on Education in Alaska, by Rev. Sheldon Jackson, D. D. (1886).

Shores and Alps of Alaska, by H. W. Seton-Karr (1887).

Thirteen Years of Travel and Exploration in Alaska, by W. H. Pierce (edited by Professor and Mrs. J. H. Carruth).

Picturesque Alaska, by Abby Johnson Woodman (1889).

Letters from Alaska, by Horace Briggs (Buffalo 1889).

The Ice Age in North America and its Bearings on the Antiquity of Man, by G. Fred-

erick Wright (1889); published by D. Appleton & Co., New York. Chapter II. of this work is devoted to the glaciers of the Pacific Coast, and Chapter III. to Professor Wright's experiences on the Muir Glacier in 1886.

The New Eldorado, a Summer Journey to Alaska, by Maturin M. Ballou (1890). This is one of Mr. Ballou's latest volumes of travels. It is devoted in part to the Yellowstone National Park and the route of the Canadian Pacific Railway.

The Wonders of Alaska, by Alexander Badlam, published by the Bancroft Company, San Francisco (1890). This and Miss Scidmore's work are the nearest approach to the guide-book form of anything extant.

A Woman's Trip to Alaska, by Septima M. Collis (1890).

The official reports of Ex-Governor Swineford and Governor Lyman E. Knapp (printed by the United States government) contain much that is interesting about Alaska. The Society of Alaskan Natural History and Ethnology (organized at Sitka in 1887) has published several pamphlet bulletins. No. 2 is *The Muir Glacier*, by Professor G. Frederick Wright, and No. 3 contains ethnographical memoranda concerning the Arctic Esquimaux in Alaska and Siberia, together with an Esquimau vocabulary by Ensign Roger Wells, Jr., U. S. N.

A Dictionary of the Chinook Jargon, or Indian Trade Language of the North Pacific Coast, is published by T. N. Hibben & Co., Victoria.

Oregon and Washington.

The Wealth and Resources of Oregon and Washington, by C. N. Miller (1889), issued by the Union Pacific Railway Company, is the latest work relating to the Pacific Northwest. It has been carefully prepared, and contains many interesting facts regarding that growing section of the country.

Washington Irving's *Astoria* and Lewis and Clark's narrative of their expedition give interesting accounts of the early explorations in Oregon and other parts of the Pacific Northwest.

The West Shore, an illustrated weekly, published by L. Samuel, Portland, Or., at $4 per year, is devoted largely to descriptive articles of the Pacific Northwest. A similar publication (issued monthly) is *The Northwest*, published by E. V. Smalley, St. Paul, Minn., at $1.50 per year.

The Yellowstone National Park and Over the Northern Pacific Railroad.

The latest and most useful hand-book for the visitor to the American Wonderland is the *Practical Guide to Yellowstone National Park*, by A. B. Guptill, illustrated and published by F. Jay Haynes & Brother. A pocket edition (50 cents) may be obtained at Mammoth Hot Springs.

The Fifth Annual United States Geological Report (for 1871) contains Dr. F. V. Hayden's original account of the Yellowstone Park region; and the subsequent volumes also contain much relating thereto, the fullest and most exhaustive account yet prepared appearing in the most recently published *Report* (the Twelfth for 1878). Part II. (503 pages), together with numerous maps, includes interesting contributions by W. H. Holmes on the Geology of the Park, Dr. A. C. Peale on Thermal Springs, and Henry Gannett on the Topography of the Park.

The reports of Captain William A. Jones, General W. F. Reynolds, Rossiter W. Raymond, Captain J. W. Barlow, Captain D. P. Heap, Professor F. B. Comstock, General W. T. Sherman, General P. H. Sheridan, Superintendent N. P. Langford, P. W. Norris, P. H. Conger, and others will be found in documents printed by order of the government.

The American Encyclopædia, *Johnson's New Universal Encyclopædia*, *Picturesque America*, *Scribner's Magazine* for 1871, '72, and '73, *Lippincott's Magazine* for 1880, *The Southern Magazine* for 1871, *Appleton's Journal* for 1881, *Nature* for 1872, *Chamber's Journal* for 1882, and the *United States Census Report* for 1880 all contain articles descriptive of the National Park and its sights; and the later works on geology by Geikie, Dana, and Le Conte have scientific references to its marvels.

There are many books of travel relating to the park, and among them are *The Great Divide*, by Lord Dunraven; James Richardson's *Wonders of the Yellowstone; Horseback Rides through the Yellowstone Park*, by H. J. Norton; *Camp and Cabin*, by Rossiter W. Raymond; *Rambles in Wonderland*, by Edwin J. Stanley; *A Pilgrimage to Geyser Land; or, Montana on Muleback*, by Ellsworth Spencer; *Rambles Overland*, by Rev. Almond Gunnison, D. D.; and *The New Eldorado* (elsewhere mentioned), by Maturin M. Ballou.

A complete list of all works having reference to the Yellowstone Park (published previous to 1882), and also lists of authorities on the thermal springs of all parts of the world, will be found in *Hayden's Twelfth Report* (Part II. pages 427–499).

Professor Arnold Hague's paper — *Geological History of the Yellowstone National Park* — appears in the "Transactions of the American Institute of Mining Engineers for 1887."

The Great Northwest, a guide book and itinerary for the use of travelers over the Northern Pacific Railroad and its allied lines, is published by Riley Brothers, St. Paul. The same firm also publish a *Guide to the Yellowstone National Park*.

A History of the Northern Pacific Railroad, by E. V. Smalley, is an account of that great enterprise from the time of its inception, in 1834, to the opening of the road, in 1883.

Photographs.

British Columbia views may be obtained of Notman, Montreal; Ross, Best & Co., Winnipeg; and Mrs. R. Maynard, Victoria.

W. H. Partridge, No. 2832 Washington street, Boston, has a large assortment of Alaska views. Catalogues will be sent on application. Partridge's views may be purchased at Sitka, as may also those of Edward D. Groff, a resident photographer.

F. J. Haynes & Brother, of St. Paul, Minn., have made a specialty of photographing the geysers and other wonders of the Yellowstone National Park. Their views are sold at the Mammoth Hot Springs, and also at No. 392 Jackson street, St. Paul, where tourists will be welcomed at all times. Catalogues will be sent from St. Paul on application. *The Yellowstone National Park in Photo-Gravure* is the title of a magnificent collection of views issued by this firm.

Standard Time Divisions.

Outward Trip.— From Boston to Port Arthur, Province of Ontario, Eastern standard or 75th meridian time; from Port Arthur to Brandon, Province of Manitoba, Central standard or 90th meridian (one hour slower than Eastern time); from Brandon to Donald, Province of British Columbia, Mountain standard or 105th meridian time (two hours slower than Eastern time); from Donald to the Pacific Coast, Pacific standard or 120th meridian time (three hours slower than Eastern time).

In Alaska.— Steamer time varies from day to day as the voyage tends westward. The time at Sitka, the westernmost point reached (135 degrees and 52 minutes west from Greenwich), is reckoned one hour slower than Pacific standard.

Homeward Trip.— From the Pacific Coast to Hope, Id., Pacific standard; from Hope to Mandan, N. D., Mountain standard; from Mandan to Port Huron, Province of Ontario, Central standard; from Port Huron eastward, Eastern standard.

SUMMER EXCURSIONS.

We have arranged a very attractive series of tours for the months of July and August, 1891. The parties will leave Boston on different dates in those months, and visits will be made to the principal resorts of New York, New England, and Canada. Among the many places to be visited are Mauch Chunk, Watkins Glen, Niagara Falls, the Thousand Islands, Hudson River, Saratoga, Trenton Falls, Lakes George and Champlain, the Adirondack Mountains, the White Mountains, the Isles of Shoals, Mount Desert, Moosehead Lake, Montreal, Quebec, the Saguenay River, and all the leading places of interest in the Maritime Provinces. The tour of the latter will include an extended round of travel through New Brunswick, Nova Scotia, Cape Breton, and Prince Edward Island, with visits to St. Andrews, Frederickton, St. John, the Annapolis valley (the land of Evangeline), Halifax, the Bras d'Or Lakes, Baddeck, Sydney, Charlottetown, etc.

A descriptive circular, giving all needed details, will be sent on application.

RAYMOND & WHITCOMB, 296 Washington St. (opposite School St.), Boston, Mass.

The Muir Glacier, Glacier Bay, Alaska.